

ExxonMobil
Environmental Services Company
18685 Main Street, Suite 101, PMB 601
Huntington Beach, CA 92648
714-964-4935 Telephone
(949) 468-9756 Cell



February 14, 2014

Mr. Luis Changkuon
California Regional Water Control District
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, California 90013

SUBJECT Second Half 2013 Groundwater Monitoring and Status Report
Former ExxonMobil Jalk Fee Property
10607 Norwalk Boulevard
Santa Fe Springs, California
CRWQCB-LAR Case No. 0203; Site I.D. No 1848000

Mr. Changkuon:

Enclosed for review is a copy of the *Second Half 2013 Groundwater Monitoring and Status Report* (Report) documenting the groundwater monitoring activities at the above-referenced site. ExxonMobil Environmental Services' consultant, Cardno ERI, prepared this report.

I, Marla Madden, do hereby declare, under penalty of perjury under the laws of the State of California, that I am Project Manager for ExxonMobil Environmental Services, that I am authorized to attest to the veracity of the information contained in the report described herein, and that the information contained in the Report for the subject site dated February 14, 2014 is true and correct, and that this declaration was executed at Huntington Beach, California, on February 14, 2014.

Please call the undersigned at (281) 654-0326 for any questions regarding the content of this Report.

Sincerely,

Marla Madden
Project Manager
ExxonMobil Environmental Services

cc: Mr. James Anderson, Cardno ERI (w/o enclosure)
Mr. Tom Perina, CH2M HILL
Ms. Lynda Deschambault, Remedial Project Manager, U.S EPA.
Mr. Thomas Clark, Coast Aluminum & Architectural, Inc.
Mr. William Macnider, CSI Electrical Contractors
Ms. Michelle F. Smith
Mr. John Maple

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Enclosures:

Acronym List

Second Half 2013 Groundwater Monitoring and Status Report dated February 14, 2014

February 14, 2014

Mr. Luis Changkuon
 California Regional Water Quality Control Board, Los Angeles Region (4)
 320 West 4th Street, Suite 200
 Los Angeles, California 90013

Cardno ERI
 License A/C10-611383

4572 Telephone Road
 Suite 916
 Ventura, CA 93003
 USA

SUBJECT **Second Half 2013 Groundwater Monitoring and Status Report**
 Former ExxonMobil Jalk Fee Property
 10607 Norwalk Boulevard
 Santa Fe Springs, California
 CRWQCB-LAR Case No. 0203 Site 1848000

Phone 805 644 4157
 Fax 805 644 5610
www.cardno.com

www.cardnoeri.com

Mr. Changkuon:

At the request of ExxonMobil Environmental Services (EMES), on behalf of ExxonMobil Production Company (ExxonMobil), Cardno ERI is submitting the *Second Half 2013 Groundwater Monitoring and Status Report* for the above-referenced site. The format utilized for the report consolidates groundwater sampling (where applicable), Title 23, Subchapter 16 reporting and consultant progress updates for ExxonMobil into one summary report.

SITE DESCRIPTION

Former ExxonMobil Jalk Fee is located at 10607 Norwalk Boulevard, in the city of Santa Fe Springs, California. The site is 8.8 acres in size and has contained multiple industrial businesses since redevelopment into an industrial park in 2003. The surrounding areas consist mainly of industrial facilities. The Continental Heat Treating (CHT) facility, located contiguous to the south of the site, has an active environmental case with the California Regional Water Quality Control Board, Los Angeles Region (CRWQCB-LAR) for the release of HVOCS, including PCE and TCE, associated with the use of a degreaser at the facility, and is under directive from the CRWQCB-LAR to perform assessment on its property (ARCADIS, 2009).

Both the former Jalk Fee property and the CHT facility are located within the Omega Chemical Superfund area, which is more than four miles long, with documented regional HVOCS concentrations in groundwater relating to historical industrial activities in the cities of Santa Fe Springs and Whittier. The constituents of concern relating to the Omega Chemical Superfund Site are HVOCS, including PCE and TCE (CH2M HILL, Inc., 2010).

GROUNDWATER MONITORING AND STATUS REPORT SUMMARY SHEET
SECOND HALF 2013
Former ExxonMobil Jalk Fee Property, 10607 Norwalk Boulevard, Santa Fe Springs, California
CARDNO ERI 1155

ACTIVITIES PERFORMED THIS REPORTING PERIOD:

- Conducted the second half 2013 groundwater monitoring and sampling event. The sampling event was coordinated with the Continental Heat Treating facility.
- Submitted a *Work Plan for Indoor Air Assessment* to the CRWQCB-LAR dated September 30, 2013.
- Submitted a *Public Participation Plan* dated September 30, 2013 to the CRWQCB-LAR, to outline the processes by which the various stakeholders will be engaged and kept informed of the progress and results of the indoor air vapor intrusion evaluation at the site.
- Submitted a *Work Plan for Additional Site Assessment Activities* dated September 30, 2013 to the CRWQCB-LAR, to further investigate the lateral and vertical extent of petroleum and chlorinated VOCs in soil and soil vapor beyond the area of previous investigations, and further investigate potential constituents of concern migration pathways and offsite contributing sources.
- Submitted a *First Half 2013 Groundwater Monitoring and Status Report* and a *Third Quarter 2013 Status Report* for the site as required by the US EPA.

TREND ANALYSIS / CONCLUSIONS:

- The PCE and TCE concentrations in site wells remained stable as compared to the previous sampling event.
- The maximum PCE concentrations have historically been measured in intermediate and deep-screened wells MW6B and MW6C, respectively.

ACTIVITIES TO BE PERFORMED NEXT REPORTING PERIOD:

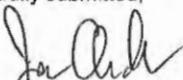
- Conduct the first half 2014 groundwater monitoring and sampling event in conjunction with Continental Heat Treating's monitoring event.
- Upon approval by the CRWQCB-LAR, implement the activities proposed in Cardno ERI's *Work Plan for Indoor Air Assessment*, *Public Participation Plan*, and *Work Plan for Additional Site Assessment Activities*.
- Submit the *Second Half 2013 Groundwater Monitoring and Status Report*.

PROPOSED FUTURE WORK TO PROGRESS SITE TOWARD CLOSURE:

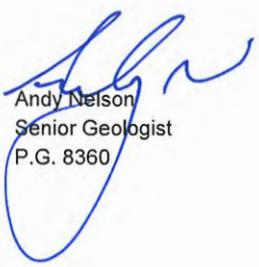
- Continue coordinated semi-annual groundwater sampling with the Continental Heat Treating facility to monitor a trend in dissolved phase chlorinated hydrocarbon concentrations.
- Evaluate the distribution and sources of the subsurface residual chlorinated and crude oil hydrocarbons based upon the results of the completed assessment and ongoing groundwater monitoring program

For any questions, please call Mr. James Anderson with Cardno ERI at 805 644 4157, extension 181805.

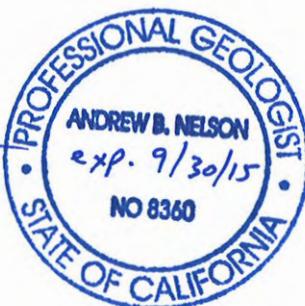
Respectfully submitted,



James Anderson
Senior Engineer



Andy Nelson
Senior Geologist
P.G. 8360



ACRONYM LIST

$\mu\text{g/L}$	Micrograms per liter	NEPA	National Environmental Policy Act
μs	Microsiemens	NGVD	National Geodetic Vertical Datum
1,2-DCA	1,2-dichloroethane	NPDES	National Pollutant Discharge Elimination System
acf m	Actual cubic feet per minute	O&M	Operations and Maintenance
AS	Air sparge	ORP	Oxidation-reduction potential
bgs	Below ground surface	OSHA	Occupational Safety and Health Administration
BTEx	Benzene, toluene, ethylbenzene, and total xylenes	OVA	Organic vapor analyzer
CEQA	California Environmental Quality Act	P&ID	Process & Instrumentation Diagram
cfm	Cubic feet per minute	PAH	Polycyclic aromatic hydrocarbon
COC	Chain of Custody	PCB	Polychlorinated biphenyl
CPT	Cone Penetration (Penetrometer) Test	PCE	Tetrachloroethylene or perchloroethylene
DIPE	Di-isopropyl ether	PID	Photo-ionization detector
DO	Dissolved oxygen	PLC	Programmable logic control
DOT	Department of Transportation	POTW	Publicly owned treatment works
DPE	Dual-phase extraction	ppmv	Parts per million by volume
DTW	Depth to water	PQL	Practical quantitation limit
EDB	1,2-dibromoethane	psi	Pounds per square inch
EPA	Environmental Protection Agency	PVC	Polyvinyl chloride
ESL	Environmental screening level	QA/QC	Quality assurance/quality control
ETBE	Ethyl tertiary butyl ether	RBSL	Risk-based screening levels
FID	Flame-ionization detector	RCRA	Resource Conservation and Recovery Act
fpm	Feet per minute	RL	Reporting limit
GAC	Granular activated carbon	scfm	Standard cubic feet per minute
gpd	Gallons per day	SSTL	Site-specific target level
gpm	Gallons per minute	STLC	Soluble threshold limit concentration
GWPTS	Groundwater pump and treat system	SVE	Soil vapor extraction
HVOC	Halogenated volatile organic compound	SVOC	Semivolatile organic compound
J	Estimated value between MDL and PQL (RL)	TAME	Tertiary amyl methyl ether
LEL	Lower explosive limit	TBA	Tertiary butyl alcohol
LPC	Liquid-phase carbon	TCE	Trichloroethylene
LRP	Liquid-ring pump	TOC	Top of well casing elevation; datum is msl
LUFT	Leaking underground fuel tank	TOG	Total oil and grease
LUST	Leaking underground storage tank	TPHd	Total petroleum hydrocarbons as diesel
MCL	Maximum contaminant level	TPHg	Total petroleum hydrocarbons as gasoline
MDL	Method detection limit	TPHmo	Total petroleum hydrocarbons as motor oil
mg/kg	Milligrams per kilogram	TPHs	Total petroleum hydrocarbons as stoddard solvent
mg/L	Milligrams per liter	TRPH	Total recoverable petroleum hydrocarbons
mg/m ³	Milligrams per cubic meter	UCL	Upper confidence level
MPE	Multi-phase extraction	USCS	Unified Soil Classification System
MRL	Method reporting limit	USGS	United States Geologic Survey
msl	Mean sea level	UST	Underground storage tank
MTBE	Methyl tertiary butyl ether	VCP	Voluntary Cleanup Program
MTCA	Model Toxics Control Act	VOC	Volatile organic compound
NAI	Natural attenuation indicators	VPC	Vapor-phase carbon
NAPL	Non-aqueous phase liquid		

GROUNDWATER MONITORING AND STATUS REPORT SUMMARY SHEET
SECOND HALF 2013
Former ExxonMobil Jalk Fee Property, 10607 Norwalk Boulevard, Santa Fe Springs, California
CARDNO ERI 1155

SITE INFORMATION:	
Responsible Party / Contact:	ExxonMobil Environmental Services / Marla D. Madden: 714 964 4935
Responsible Party Address:	18685 Main Street, Suite 101, PMB 601, Huntington Beach, CA 92648
Station / Site ID:	Jalk Fee
Current Site Use:	Multi-use Commercial property
Global ID:	SL184801463
Lead Regulatory Agency/Case#/Site#/Case Worker:	CRWQCB-LAR / 0203 / 1848000 / Mr. Luis Changkuon
Date of Most Recent Regulatory Letter:	July 30, 2013
Primary Consultant / Project Manager:	Cardno ERI / Mr. James Anderson 805 644 4157, ext. 181805
Well Monitoring Contractor:	Cardno ERI
Site Monitoring Frequency:	Semi-annual
Well(s) and/or Subsurface Water Within 2,000 ft.:	None
Number of Groundwater Wells On Site:	14
Number of Groundwater Wells Off Site:	3
Phase of Vadose Investigation:	Assessment
Phase of Groundwater Investigation:	Assessment
Nature of Impact:	Chlorinated hydrocarbons/Crude oil

SITE HYDROLOGY

Number of Water Zones:	3
Depth to Groundwater Range (ft-TOC)	92.21 - 94.71
Potentiometric Surface Elevation Range (ft-MSL):	40.37 - 44.18
Flow Direction/Hydraulic Gradient (ft/ft):	Southwest / 0.006

FIELD ACTIVITY (CURRENT REPORTING PERIOD):		Wells with NAPL:	
		Well	Feet
Groundwater Monitoring Date:	10/9-10/13	None	N/A
Groundwater Wells Gauged:	17		
Groundwater Wells Sampled:	17		
Sampling Method:	Purge		
Gallons of Groundwater Purged:	872		
Treatment Method / Disposal Facility:	Recycle/Crosby & Overton		
Analysis:	TPHg, THPd, and TPHco by EPA 8015B (M); full scan VOCs by EPA 8260B		

GROUNDWATER CONDITIONS SHALLOW WELLS:

No. of wells with Detectable PCE:	7	PCE Range (ug/l):	9.10 - 196
No. of wells with Detectable TCE:	7	TCE Range (ug/l):	43.4 - 123
No. of wells with Detectable 1,1-DCA:	7	1,1-DCA Range (ug/l):	8.60 - 23.0
No. of wells with Detectable 1,1-DCE:	7	1,1-DCE Range (ug/l):	19.2 - 119

GROUNDWATER CONDITIONS INTERMEDIATE WELLS:

No. of wells with Detectable PCE:	5	PCE Range (ug/l):	4.38 - 641
No. of wells with Detectable TCE:	5	TCE Range (ug/l):	37.7 - 167
No. of wells with Detectable 1,1-DCA:	5	1,1-DCA Range (ug/l):	3.79 - 21.5
No. of wells with Detectable 1,1-DCE:	5	1,1-DCE Range (ug/l):	53.7 - 117

GROUNDWATER CONDITIONS DEEP WELLS:

No. of wells with Detectable PCE:	5	PCE Range (ug/l):	7.41 - 359
No. of wells with Detectable TCE:	5	TCE Range (ug/l):	2.26 - 77.6
No. of wells with Detectable 1,1-DCA:	5	1,1-DCA Range (ug/l):	1.42 - 11.3
No. of wells with Detectable 1,1-DCE:	5	1,1-DCE Range (ug/l):	9.87 - 49.6

February 14, 2014
Cardno ERI 08115504.2H13

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Please call me at 805 644 4157, extension 181805, if you have any questions.

Sincerely,

A handwritten signature in black ink, appearing to read "James Anderson".

James Anderson
Senior Engineer
for Cardno ERI
Direct Line 805 644 4157, extension 181805
Email: james.anderson@cardno.com

cc: Ms. Marla Madden, EMES

Enclosures:

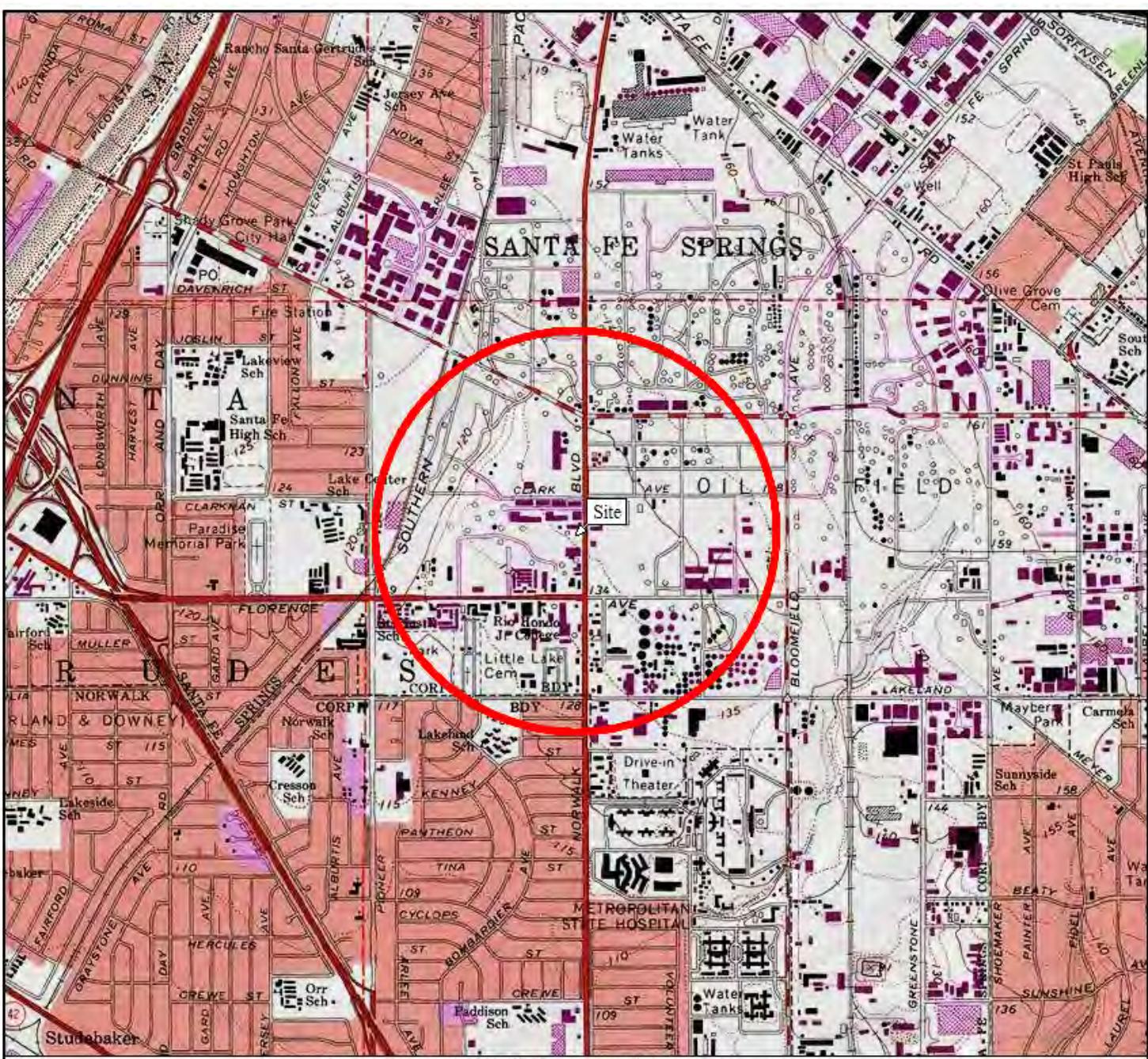
Acronym List

Second Half 2013 Groundwater Monitoring and Status Report dated February 14, 2014

GROUNDWATER MONITORING AND STATUS REPORT SUMMARY SHEET
SECOND HALF 2013
Former ExxonMobil Jalk Fee Property, 10607 Norwalk Boulevard, Santa Fe Springs, California
CARDNO ERI 1155

ATTACHED:

- Site Location Map (Plate 1)
- Generalized Site Plan (Plate 2)
- Groundwater Elevation Map – 10/9-10/13 (Plate 3)
- PCE Groundwater Concentration Map - Shallow Wells – 10/9-10/13 (Plate 4)
- TCE Groundwater Concentration Map - Shallow Wells – 10/9-10/13 (Plate 5)
- 1,1-DCA Groundwater Concentration Map - Shallow Wells – 10/9-10/13 (Plate 6)
- 1,1-DCE Groundwater Concentration Map - Shallow Wells – 10/9-10/13 (Plate 7)
- PCE Groundwater Concentration Map - Intermediate Wells – 10/9-10/13 (Plate 8)
- TCE Groundwater Concentration Map - Intermediate Wells – 10/9-10/13 (Plate 9)
- 1,1-DCA Groundwater Concentration Map - Intermediate Wells – 10/9-10/13 (Plate 10)
- 1,1-DCE Groundwater Concentration Map - Intermediate Wells – 10/9-10/13 (Plate 11)
- PCE Groundwater Concentration Map - Deep Wells – 10/9-10/13 (Plate 12)
- TCE Groundwater Concentration Map - Deep Wells – 10/9-10/13 (Plate 13)
- 1,1-DCA Groundwater Concentration Map - Deep Wells – 10/9-10/13 (Plate 14)
- 1,1-DCE Groundwater Concentration Map - Deep Wells – 10/9-10/13 (Plate 15)
- Water Level Measurements and Groundwater Analyses (Table 1)
- Cumulative Water Level Measurements and Groundwater Analyses (Table 2)
- Summary of BTEX and Fuel Oxygenates Groundwater Monitoring Results (Table 3)
- Cumulative BTEX and Fuel Oxygenates Groundwater Monitoring Results (Table 4)
- Freon Groundwater Monitoring Results (Table 5)
- Laboratory Reports
- Groundwater Sampling Field Log
- Bill of Lading
- Groundwater Monitoring and Sampling Field Protocol



FN 1156TOPO

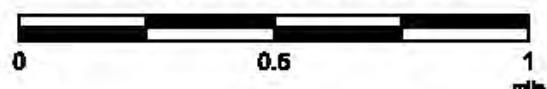
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Version: 1981

EXPLANATION

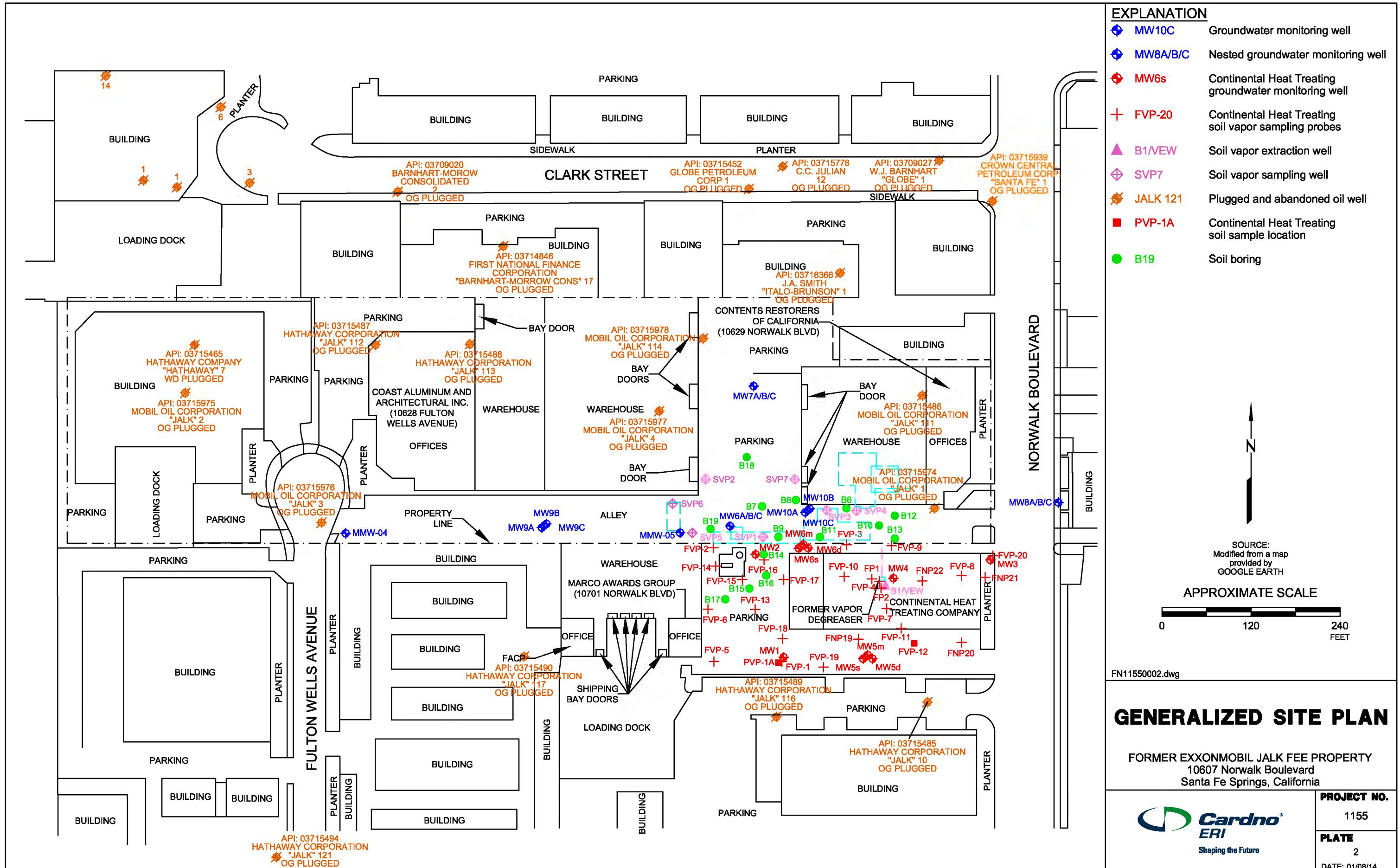


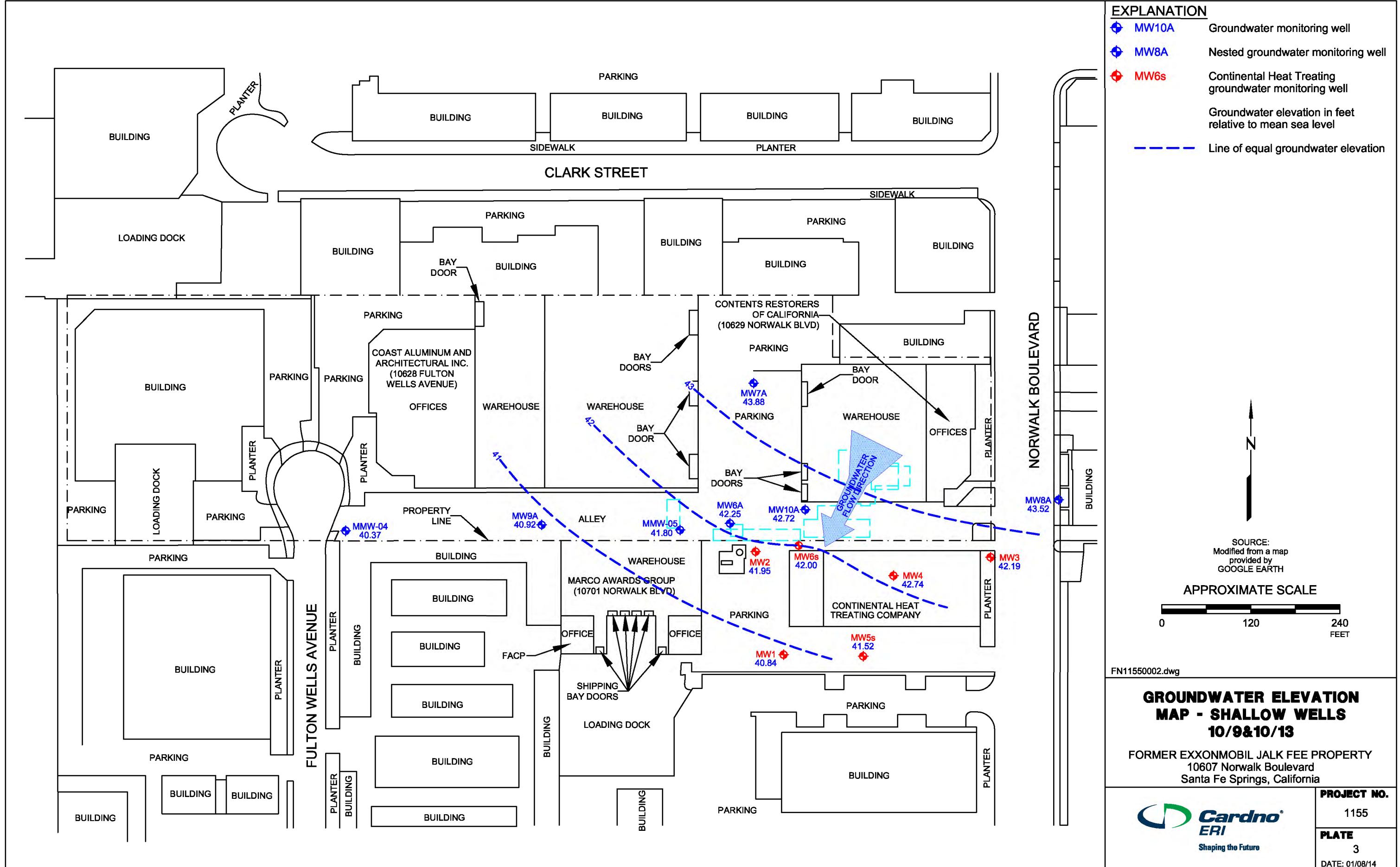
1/2-mile radius circle

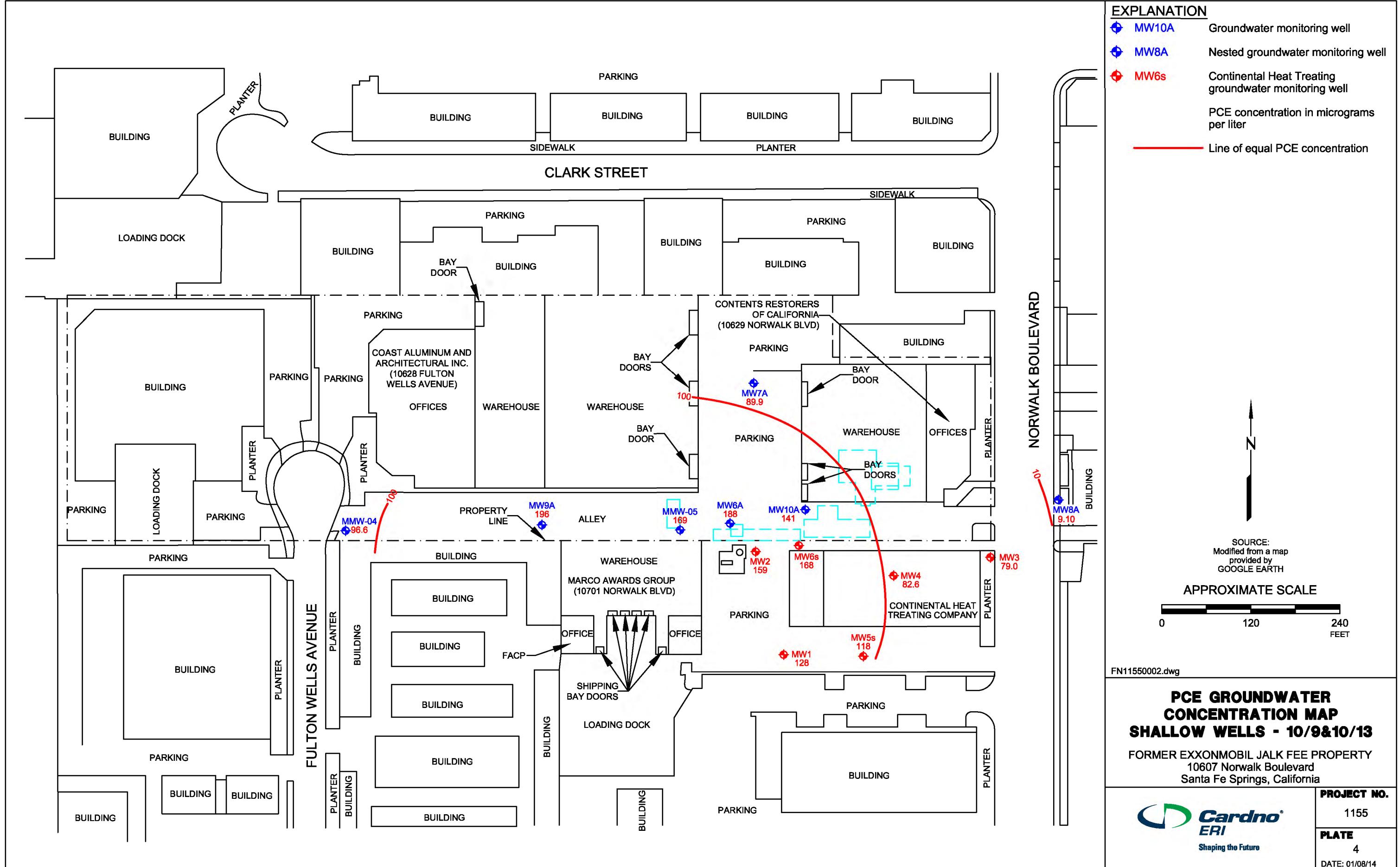
APPROXIMATE SCALE

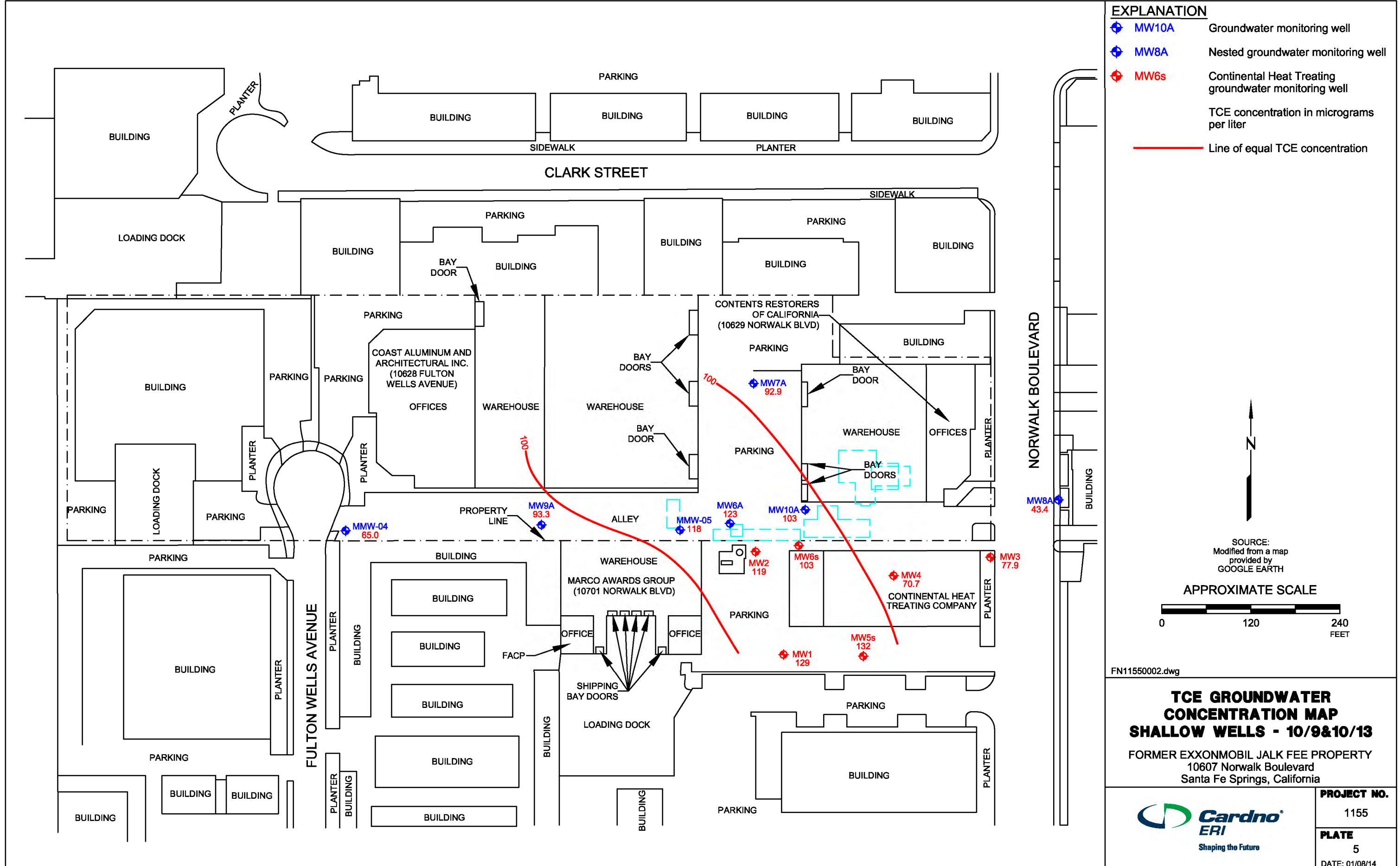


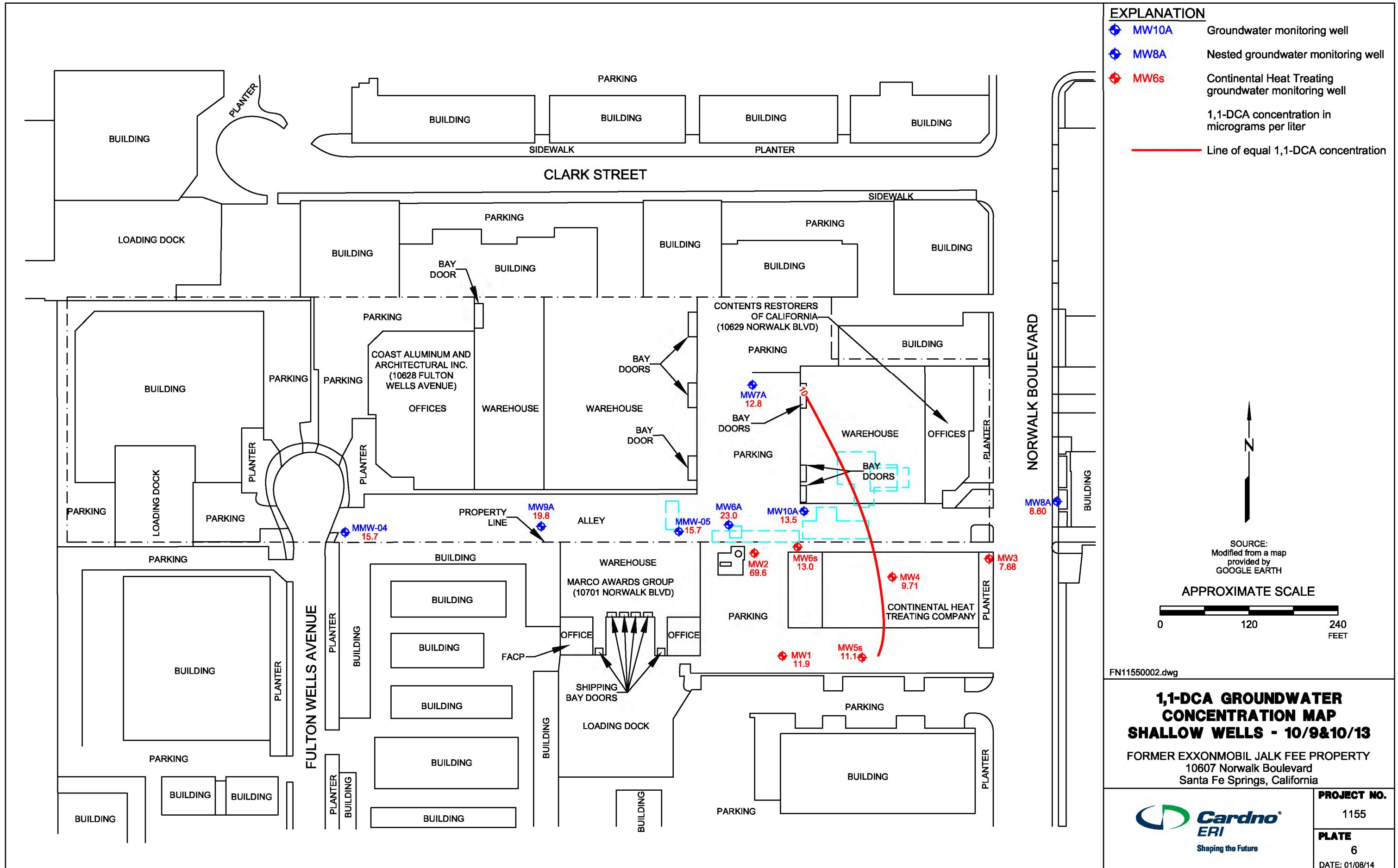
SOURCE:
Modified from a map
provided by
National Geographic's TOPO!

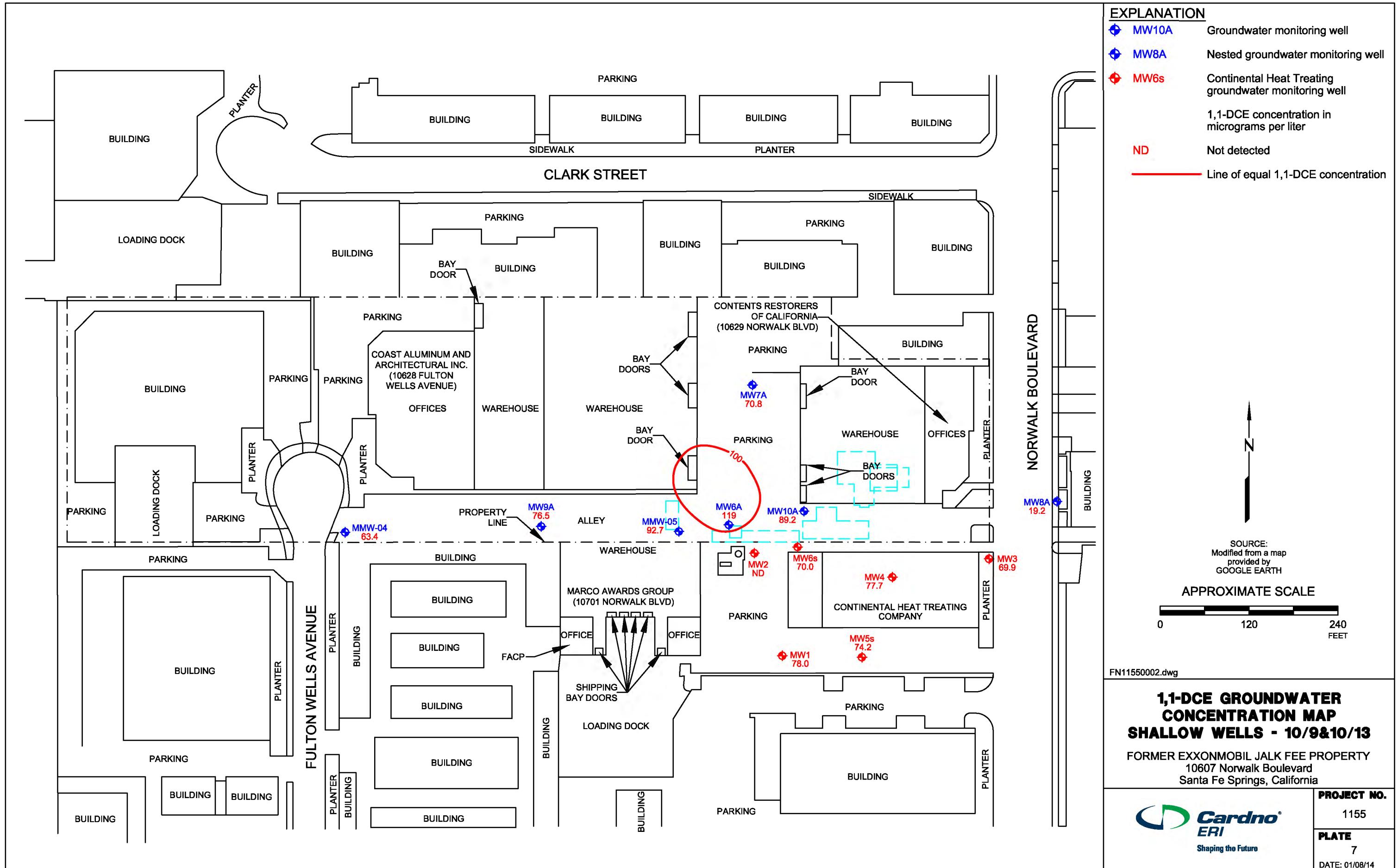


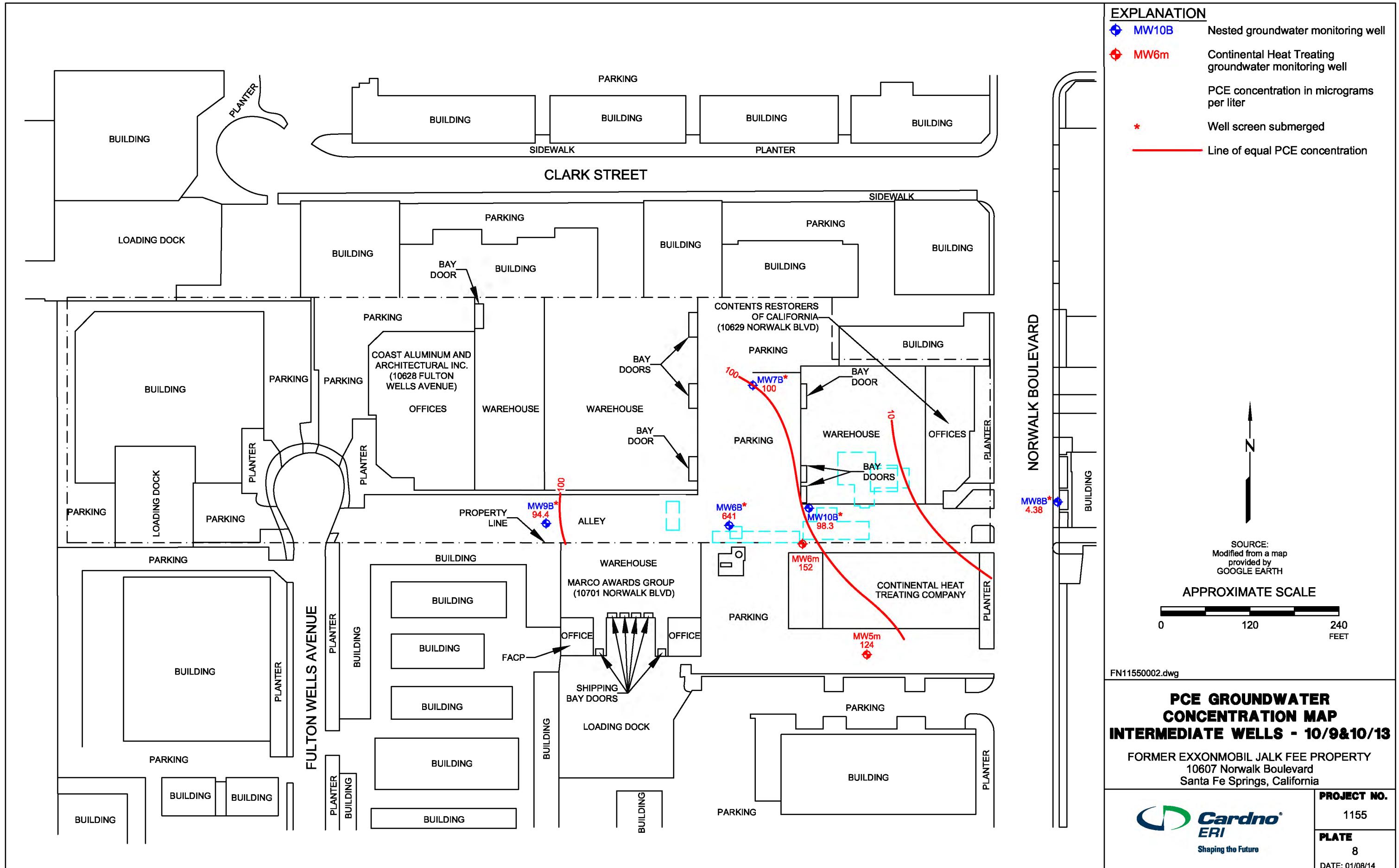


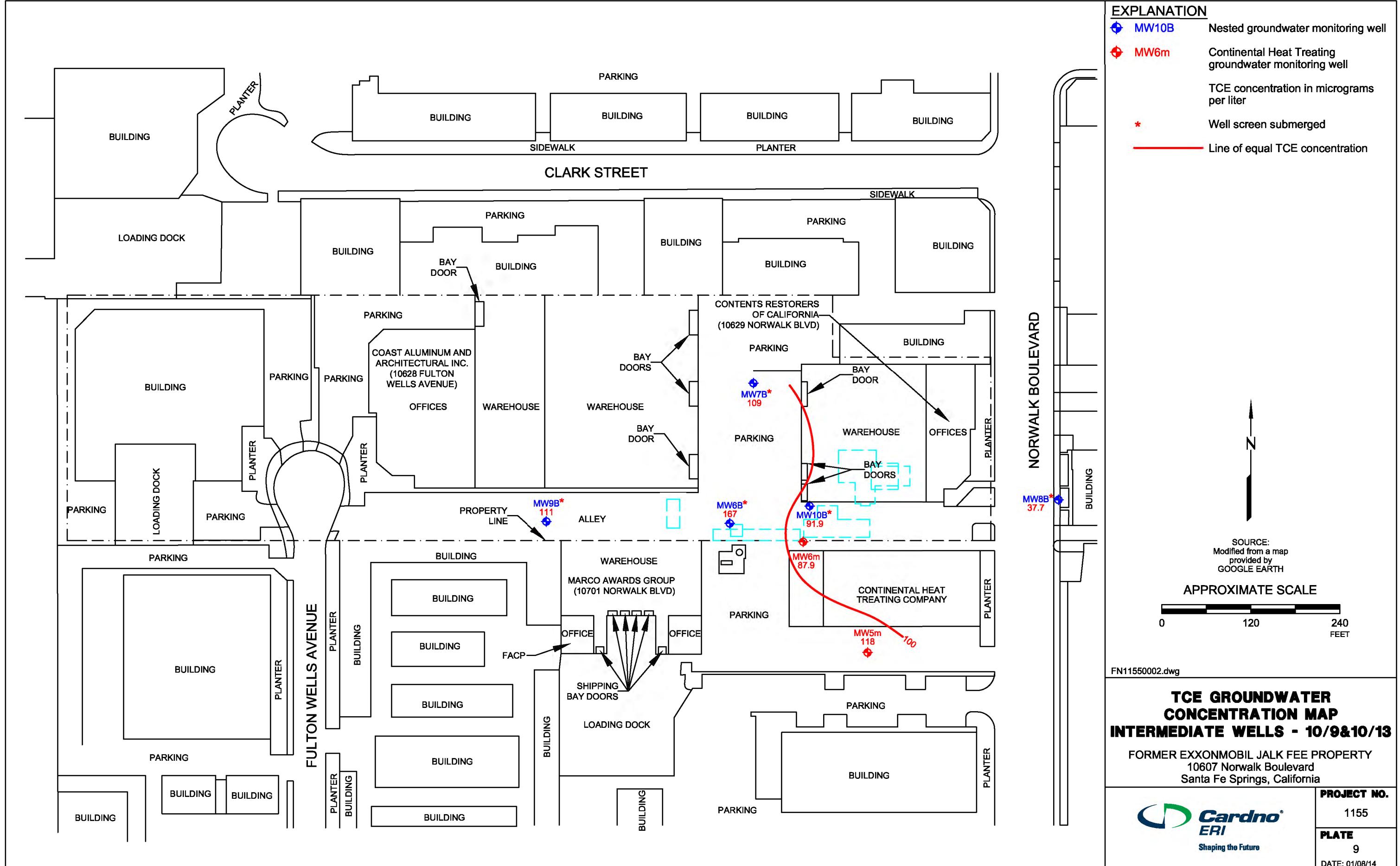


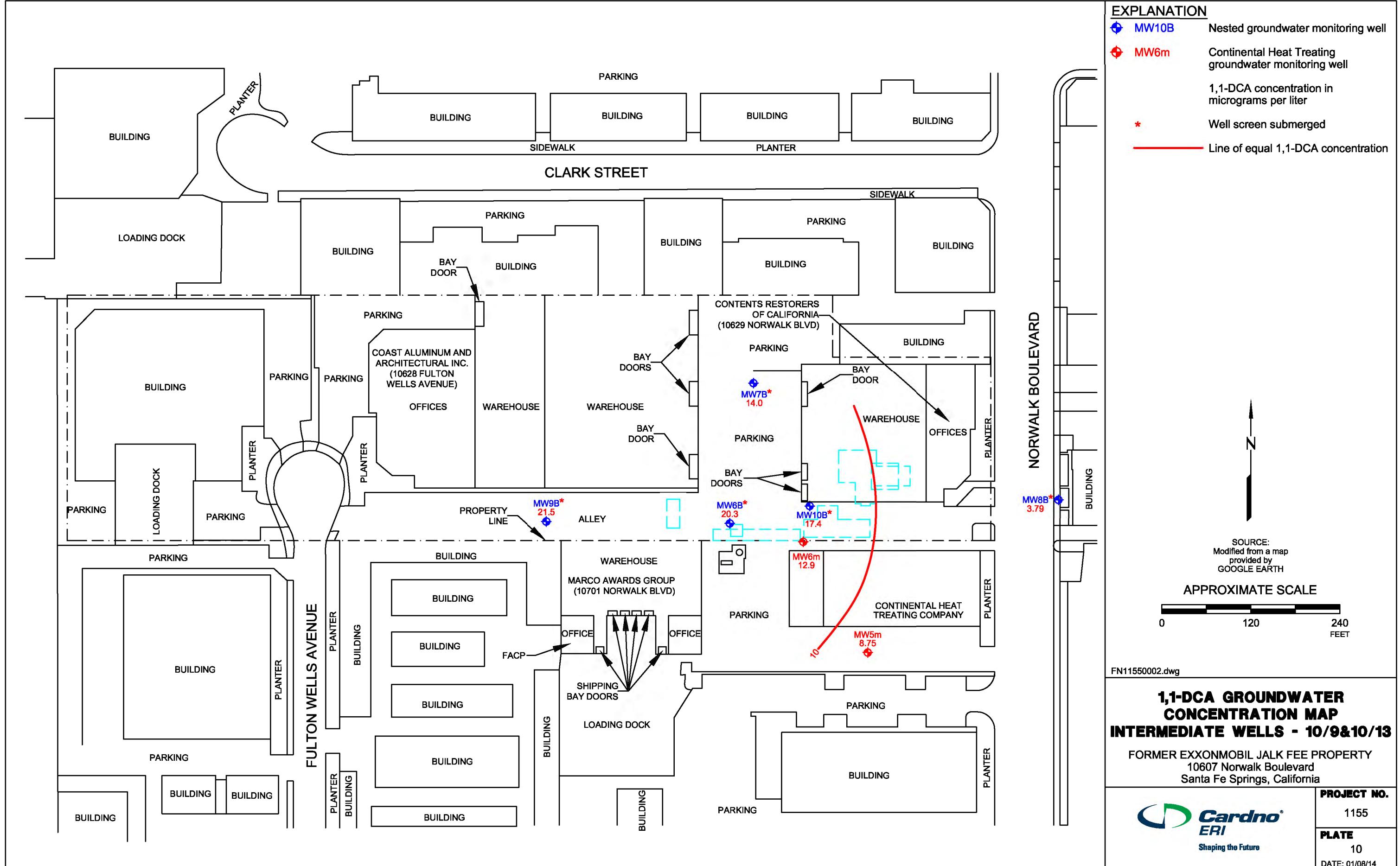


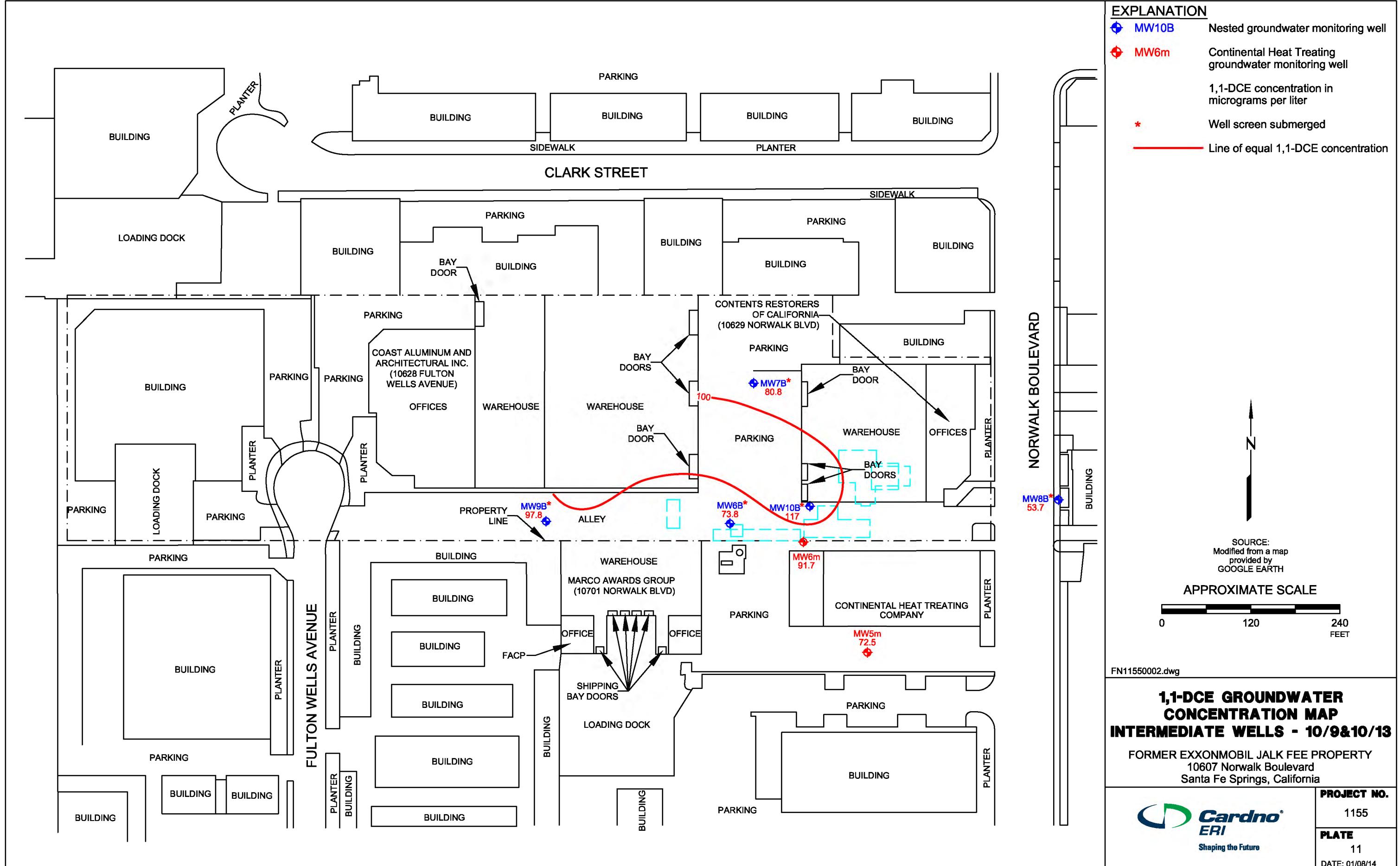


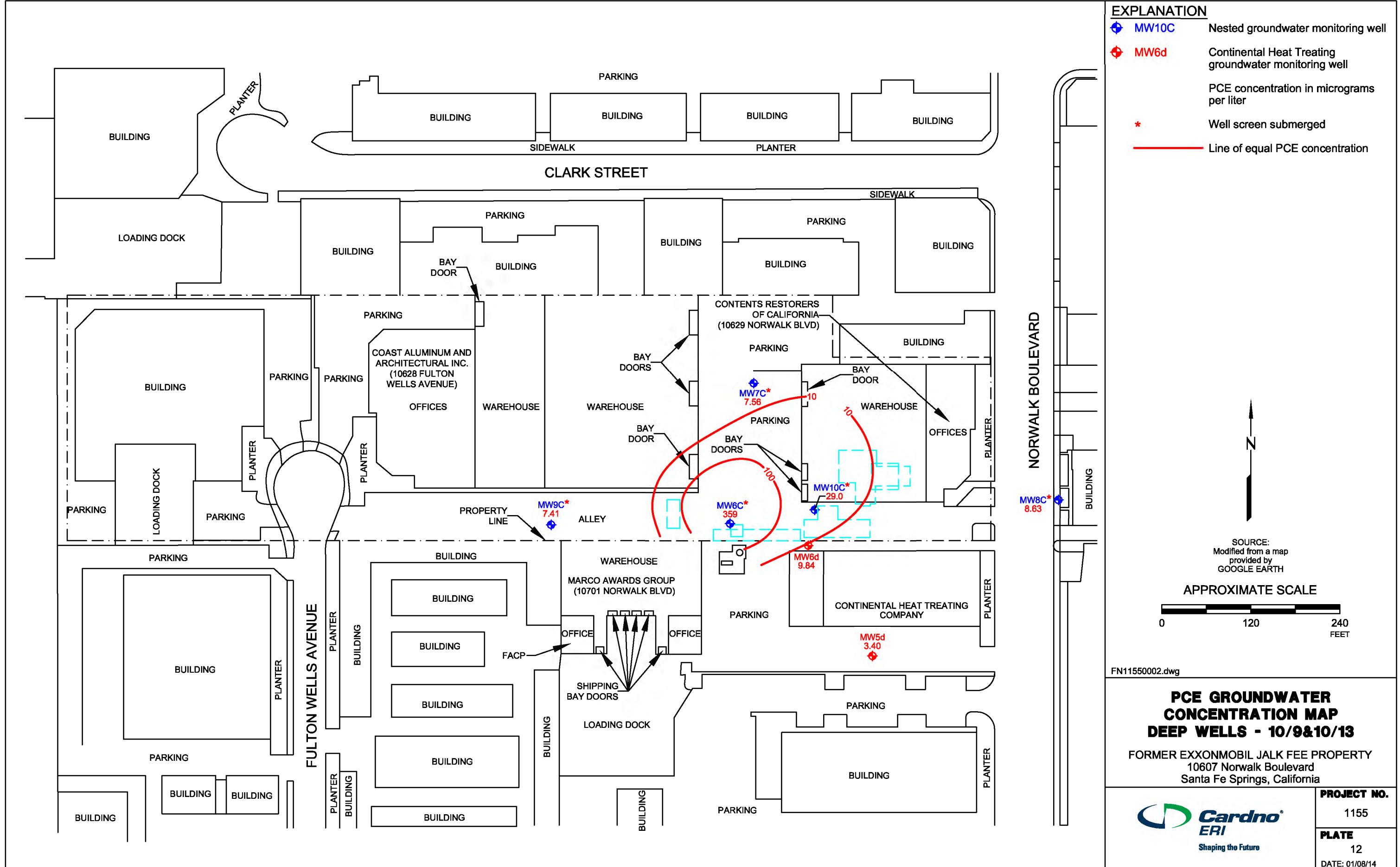


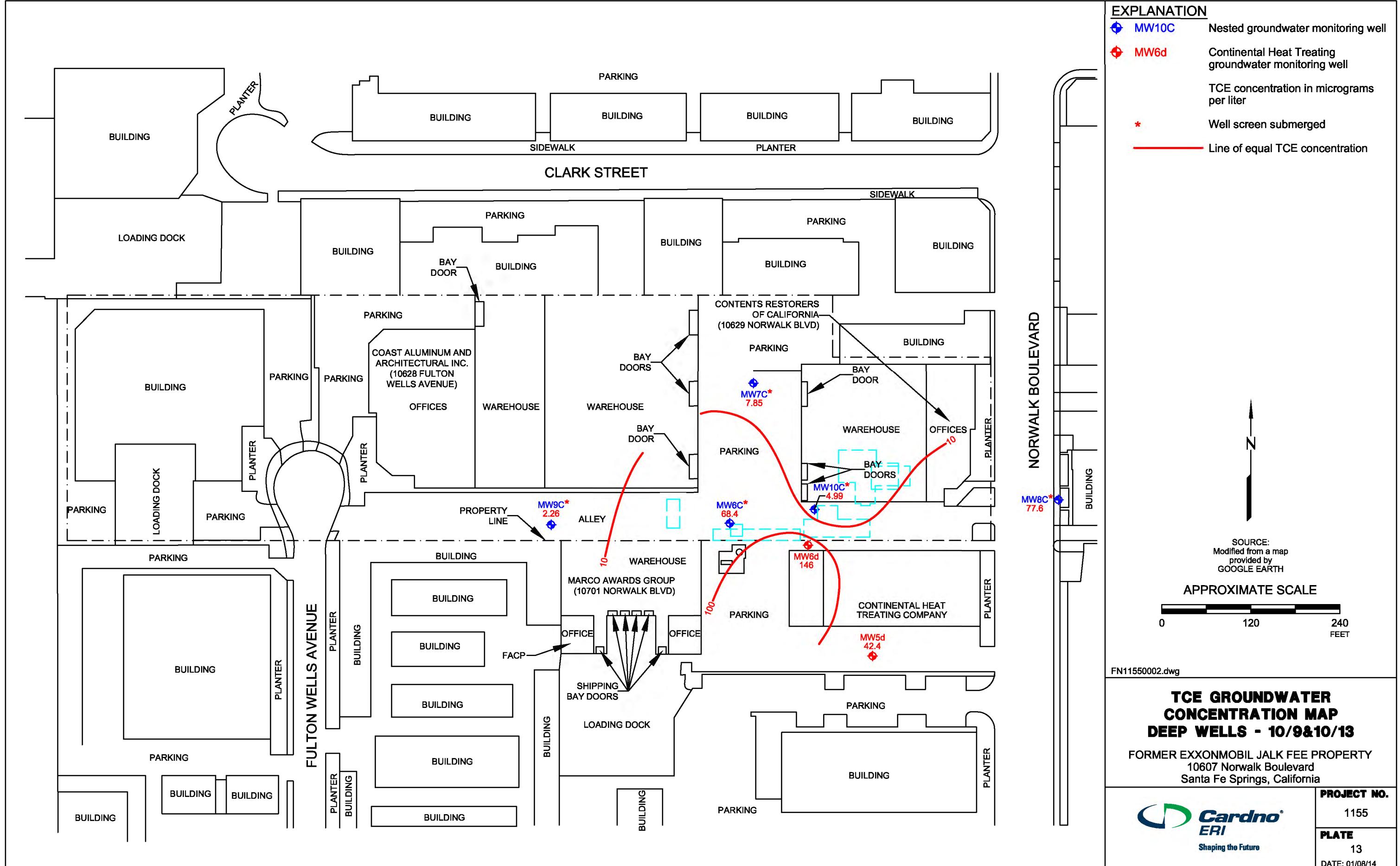


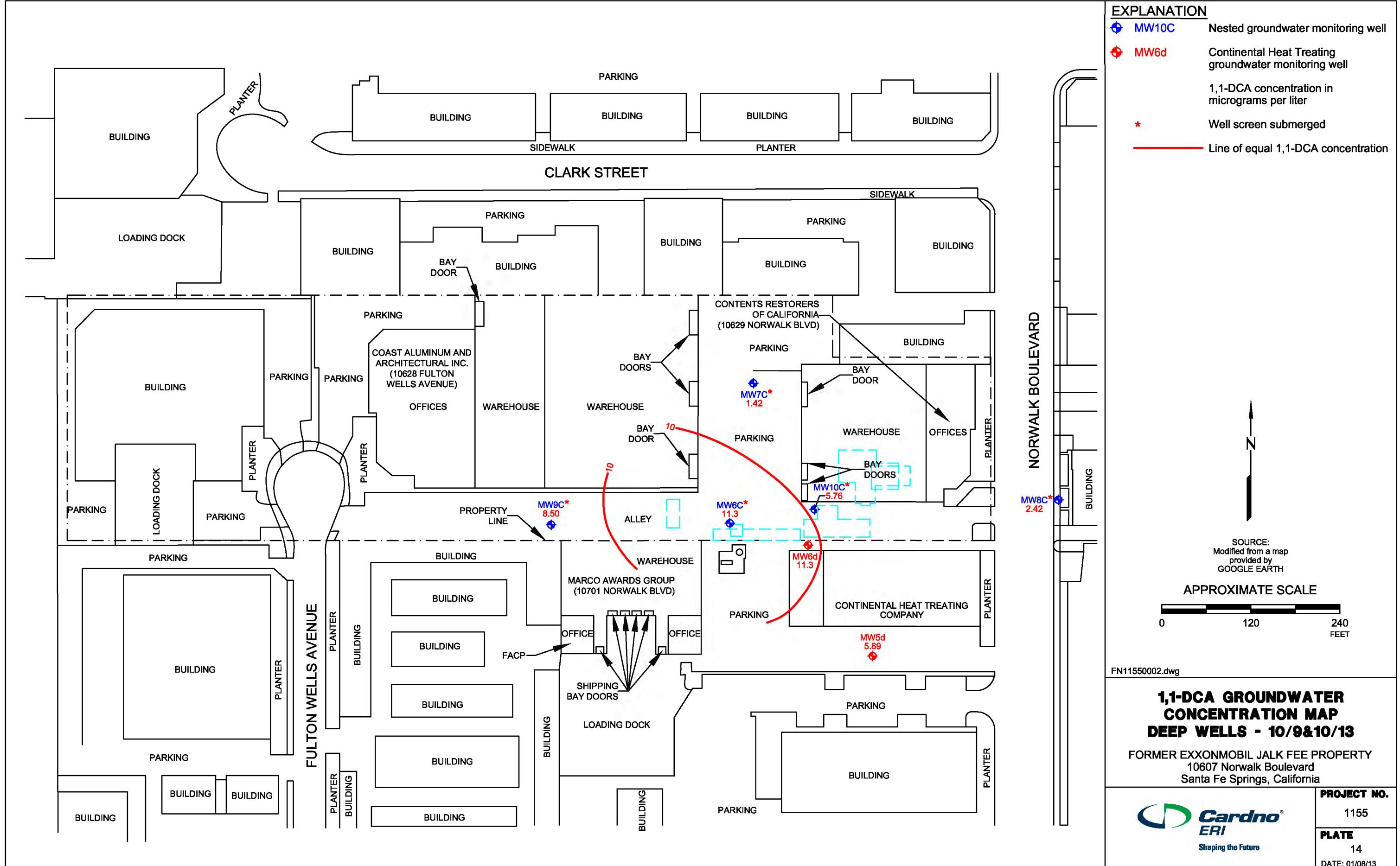












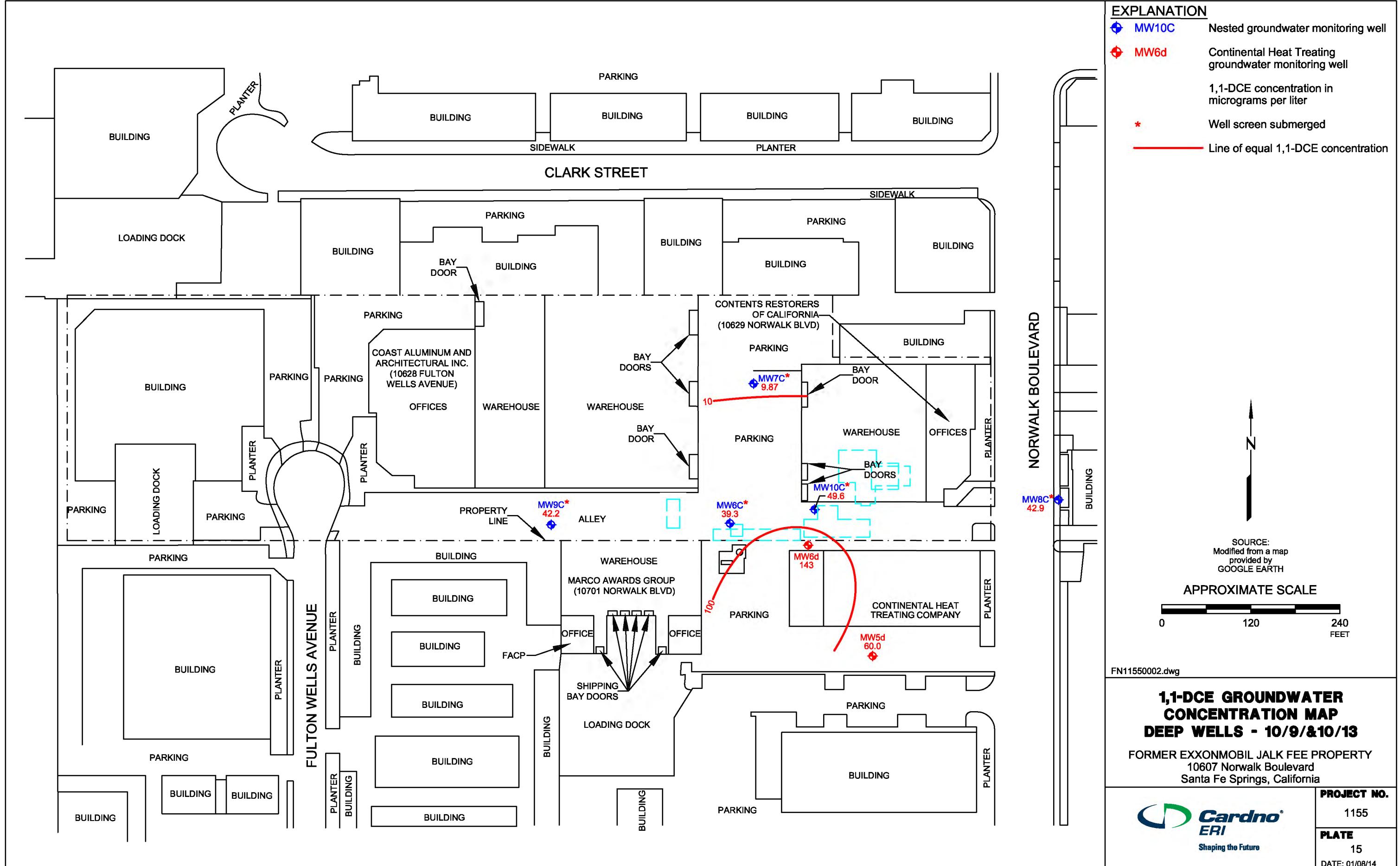


TABLE 1
WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

DATE	Well Elev (feet-MSL)	GW Depth (feet-TOC)	GW Elev (feet-MSL)	PCE ($\mu\text{g/l}$)	TCE ($\mu\text{g/l}$)	DCE ($\mu\text{g/l}$)	Vinyl Chloride ($\mu\text{g/l}$)	1,1,1-Trichloroethane ($\mu\text{g/l}$)	1,1,2-Trichloro- 1,2,2 Trifluoroethane ($\mu\text{g/l}$)	1,1-Dichloroethane ($\mu\text{g/l}$)
Field Point	MMW-04									
10/10/2013	133.14	92.77	40.37	96.6	65.0	35.5	<0.500	0.333 J	14.4	15.7
Field Point	MMW-05									
10/9/2013	135.54	93.74	41.80	169	118	36.9	<0.500	0.256 J	45.6	15.7
Field Point	MW6A									
10/9/2013	136.53	94.28	42.25	188	123	51.8	<0.500	0.357 J	38.2	23.0
Field Point	MW6B									
10/9/2013	136.54	93.68	42.86	641	167	355	13.4	<0.500	1.84	20.3
Field Point	MW6C									
10/9/2013	136.53	93.10	43.43	359	68.3	70.1	8.01	<0.500	0.389 J	11.3
10/9/2013 D	136.53			316	68.4	67.8	8.38	<0.500	0.351 J	11.2
Field Point	MW7A									
10/10/2013	138.22	94.34	43.88	89.9	92.9	32.8	0.738	<0.500	17.1	12.8
Field Point	MW7B									
10/10/2013	138.14	93.96	44.18	100	109	37.3	0.314 J	<0.500	20.5	14.0
Field Point	MW7C									
10/10/2013	138.22	94.04	44.18	7.56	7.85	5.30	<0.500	<0.500	<1.00	1.42
Field Point	MW8A									
10/10/2013	137.66	94.14	43.52	9.10	43.4	5.35	26.8	<0.500	1.18	8.60
Field Point	MW8B									
10/10/2013	137.70	93.61	44.09	4.38	37.7	80.6	18.2	<0.500	<1.00	3.79
Field Point	MW8C									
10/10/2013	137.73	93.59	44.14	8.63	77.6	37.1	13.2	<0.500	<1.00	2.42
Field Point	MW9A									
10/9/2013	135.14	94.22	40.92	196	93.3	426	<0.500	0.423 J	27.2	19.8
Field Point	MW9B									
10/9/2013	135.18	92.21	42.97	94.4	111	112	1.71	<0.500	3.64	21.5

TABLE 1
WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

DATE	Well Elev (feet-MSL)	GW Depth (feet-TOC)	GW Elev (feet-MSL)	PCE ($\mu\text{g/l}$)	TCE ($\mu\text{g/l}$)	DCE ($\mu\text{g/l}$)	Vinyl Chloride ($\mu\text{g/l}$)	1,1,1- Trichloroethane ($\mu\text{g/l}$)	1,1,2-Trichloro- 1,2,2 Trifluoroethane ($\mu\text{g/l}$)	1,1- Dichloroethane ($\mu\text{g/l}$)
Field Point MW9C Well Screen Interval (feet): 175-185										
10/9/2013	135.38	93.81	41.57	7.41	2.26	51.8	20.2	<0.500	<1.00	8.50
Field Point MW10A Well Screen Interval (feet): 80-110										
10/10/2013	137.43	94.71	42.72	141	103	39.8	0.441 J	<0.500	31.3	13.5
Field Point MW10B Well Screen Interval (feet): 140-150										
10/10/2013	137.46	93.79	43.67	98.3	91.9	79.5	<0.500	<0.500	12.9	17.4
Field Point MW10C Well Screen Interval (feet): 165-175										
10/10/2013	137.44	93.71	43.73	29.0	4.99	105	16.4	<0.500	<1.00	5.76
Field Point TRIP BLANK Well Screen Interval (feet):										
10/9/2013				<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500
10/10/2013				<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500

TABLE 1
WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

DATE	1,1- Dichloroethene ($\mu\text{g/l}$)	1,2,3- Trichlorobenzene ($\mu\text{g/l}$)	1,2,4- Trimethylbenzene ($\mu\text{g/l}$)	1,2- Dichloropropane ($\mu\text{g/l}$)	1,4- Dichlorobenzene ($\mu\text{g/l}$)	Acetone ($\mu\text{g/l}$)	Chloroform ($\mu\text{g/l}$)	Trichlorofluoro- methane ($\mu\text{g/l}$)
Field Point MMW-04		Well Screen Interval (feet): 60-105						
10/10/2013	63.4	<0.500	<0.500	1.54	<0.500	<5.00	4.82	6.50
Field Point MMW-05		Well Screen Interval (feet): 61-106						
10/9/2013	92.7	<0.500	<0.500	0.439 J	<0.500	<5.00	8.42	17.6
Field Point MW6A		Well Screen Interval (feet): 80-110						
10/9/2013	119	<0.500	<0.500	0.410 J	<0.500	12.3	9.59	16.4
Field Point MW6B		Well Screen Interval (feet): 130-140						
10/9/2013	73.8	<0.500	<0.500	0.255 J	<0.500	<5.00	0.519	0.357 J
Field Point MW6C		Well Screen Interval (feet): 170-180						
10/9/2013	39.3	<0.500	<0.500	0.382 J	<0.500	<5.00	<0.500	<0.500
10/9/2013 D	38.0	<0.500	<0.500	0.367 J	<0.500	<5.00	<0.500	<0.500
Field Point MW7A		Well Screen Interval (feet): 80-110						
10/10/2013	70.8	<0.500	0.299 J	<0.500	<0.500	<5.00	5.20	7.99
Field Point MW7B		Well Screen Interval (feet): 130-140						
10/10/2013	80.8	<0.500	<0.500	<0.500	<0.500	<5.00	3.33	5.19
Field Point MW7C		Well Screen Interval (feet): 165-175						
10/10/2013	9.87	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500
Field Point MW8A		Well Screen Interval (feet): 85-115						
10/10/2013	19.2	<0.500	0.248 J	<0.500	<0.500	<5.00	<0.500	<0.500
Field Point MW8B		Well Screen Interval (feet): 130-140						
10/10/2013	53.7	<0.500	0.430 J	<0.500	<0.500	<5.00	<0.500	<0.500
Field Point MW8C		Well Screen Interval (feet): 150-160						
10/10/2013	42.9	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500
Field Point MW9A		Well Screen Interval (feet): 80-110.5						
10/9/2013	76.5	<0.500	<0.500	0.468 J	<0.500	10.3	7.59	12.6
Field Point MW9B		Well Screen Interval (feet): 140-150						
10/9/2013	97.8	<0.500	<0.500	<0.500	<0.500	<5.00	0.734	0.501

TABLE 1
WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

DATE	1,1- Dichloroethene ($\mu\text{g/l}$)	1,2,3- Trichlorobenzene ($\mu\text{g/l}$)	1,2,4- Trimethylbenzene ($\mu\text{g/l}$)	1,2- Dichloropropane ($\mu\text{g/l}$)	1,4- Dichlorobenzene ($\mu\text{g/l}$)	Acetone ($\mu\text{g/l}$)	Chloroform ($\mu\text{g/l}$)	Trichlorofluoro- -methane ($\mu\text{g/l}$)
Field Point MW9C		Well Screen Interval (feet): 175-185						
10/9/2013	42.2	<0.500	<0.500	0.351 J	<0.500	<5.00	<0.500	<0.500
Field Point MW10A		Well Screen Interval (feet): 80-110						
10/10/2013	89.2	<0.500	<0.500	0.286 J	<0.500	<5.00	6.33	12.1
Field Point MW10B		Well Screen Interval (feet): 140-150						
10/10/2013	117	<0.500	<0.500	<0.500	<0.500	<5.00	2.97	1.79
Field Point MW10C		Well Screen Interval (feet): 165-175						
10/10/2013	49.6	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500
Field Point TRIP BLANK		Well Screen Interval (feet):						
10/9/2013	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500
10/10/2013	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500

TABLE 1
WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

EXPLANATION:

Constituents analyzed by EPA Method 8260B.

(a) = values supplied by previous consultant

(b) = date of well abandonment not known

D = duplicate

ELEV = elevation

GW = groundwater

feet-MSL = feet above mean sea level

feet-TOC = feet below top of casing

NAPL = non-aqueous phase liquid (thickness measured in feet)

EPA = Environmental Protection Agency

DCE = c-1,2-Dichloroethene

PCE = Tetrachloroethylene or perchloroethylene

TCE = Trichloroethene

J = estimated value between method detection limit and practical quantitation limit

ND = not detected at or above the stated laboratory reporting limit

< = not detected at or above the stated laboratory reporting limit

µg/l = micrograms per liter

TABLE 2
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

DATE	Well	Elev	GW Depth	GW Elev	PCE	TCE	DCE	Vinyl Chloride	1,1,1- Trichloroethane	1,1,2-Trichloro- 1,2,2 Trifluoroethane	1,1- Dichloroethane	
		(feet-MSL)	(feet-TOC)	(feet-MSL)	($\mu\text{g/l}$)	($\mu\text{g/l}$)	($\mu\text{g/l}$)	($\mu\text{g/l}$)	($\mu\text{g/l}$)	($\mu\text{g/l}$)	($\mu\text{g/l}$)	
Field Point	MMW-03	Well Screen Interval (feet):										
8/31/2000 (a)	134.26	70.67	63.59	4.4	0.5	--		--	--	--	1.7	
3/5/2001 (a)	134.26	71.30	62.96	14	20	0.65 J		<1.0	--	--	1.5	
6/12/2001 (a)	134.26	70.07	64.19	9.5	22	<1.0		<1.0	--	--	1.9	
12/31/2001 (a)(b)				WELL ABANDONED								
Field Point	MMW-04	Well Screen Interval (feet): 60-105										
6/6/2000 (a)	131.40	70.46	60.94	--	--	--		--	--	--	--	
8/31/2000 (a)	131.40	70.58	60.82	6.7	17	--		ND<1.0	--	--	1.9	
11/28/2000 (a)	131.40	71.28	60.12	--	--	--		--	--	--	--	
3/5/2001 (a)	131.40	71.02	60.38	26	27	2.3		ND<1.0	--	--	2.7	
6/12/2001 (a)	131.40	69.81	61.59	11	21	2		ND<1.0	--	--	2.6	
12/23/2003 (a)	131.40	78.38	53.02	16	21	ND<1.0		ND<1.0	--	--	2.3	
12/21/2004 (a)	131.40	84.73	46.67	14	22	0.83 J		ND<1.0	ND<10	--	2.4	
12/2/2005 (a)	131.40	79.01	52.39	15	17	0.71 J		ND<1.0	ND<10	--	1.8	
12/19/2006 (a)	131.40	76.66	54.74	9.1	15	0.68 J		ND<1.0	ND<10	--	1.9	
12/21/2007 (a)	131.40	79.73	51.67	17	23	1.8		ND<1.0	ND<10	--	3.2	
10/24/2008 (a)	131.40	84.13	47.27	26	27	5.8		ND<1.0	2.0 J	--	4.5	
9/22/2009 (a)	131.40	91.00	40.40	71	60	47		0.52 J	8.1 J	--	17	
10/14/2010	131.40	94.25	37.15	85	64	61	<0.50	<1.0	11	--	21	
4/19/2011	131.40	91.75	39.65	130	78	74	<0.50	0.93 J	13	--	28	
11/16/2011	131.40	86.13	45.27	100	61	60	<0.50	0.70 J	9.7 J	--	22	
5/3/2012	131.40	84.10	47.30	56.2	48.3	29.0	<0.500	0.300 J	8.83	--	13.4	
11/17/2012	131.40	86.59	44.81	73.0	52.5	27.8	<0.500	0.267 J	9.11	--	12.8	
5/2/2013	133.14	88.81	44.33	75.2	50.1	34.0	<0.500	0.228 J	8.24	--	14.2	
10/10/2013	133.14	92.77	40.37	96.6	65.0	35.5	<0.500	0.333 J	14.4	--	15.7	
Field Point	MMW-05	Well Screen Interval (feet): 61-106										

TABLE 2
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

DATE	Well Elev (feet-MSL)	GW Depth (feet-TOC)	GW Elev (feet-MSL)	PCE ($\mu\text{g/l}$)	TCE ($\mu\text{g/l}$)	DCE ($\mu\text{g/l}$)	Vinyl Chloride ($\mu\text{g/l}$)	1,1,1- Trichloroethane ($\mu\text{g/l}$)	1,1,2-Trichloro- 1,2,2 Trifluoroethane ($\mu\text{g/l}$)	1,1- Dichloroethane ($\mu\text{g/l}$)
9/15/2000 (a)				ND<1.0	ND<1.0	--		--	--	ND<1.0
3/5/2001 (a)	133.38	72.47	60.91	650	63	4.1 J		ND<5.0	--	3.6 J
6/12/2001 (a)	133.38	71.29	62.09	350	44	3.7		ND<2.0	--	3.2
12/23/2003 (a)	133.38	79.72	53.66	660	140	61		5.2	--	14
12/21/2004 (a)	133.38	86.02	47.36	510	190	180		ND<10	14 J	43
12/2/2005 (a)	133.38	80.69	52.69	330	110	120		4.3	12	33
12/19/2006 (a)	133.38	78.29	55.09	160	100	120		3.6	ND<10	37
12/21/2007 (a)	133.38	80.94	52.44	640	110	110		ND<5.0	ND<50	36
10/24/2008 (a)	133.38	85.19	48.19	510	100	96		ND<5.0	15 J	29
9/22/2009 (a)	133.38	92.10	41.28	160	120	120		1.2	24	42
10/14/2010	133.38	96.85	36.53	170	130	71	<0.50	<1.0	25	25
4/19/2011	133.38	95.05	38.33	500	130	76	1.1	<1.0	18	24
11/16/2011	133.38	89.24	44.14	210	140	88	<1.0	1.1 J	26	37
5/3/2012	133.38	85.80	47.58	144	102	67.1	<0.500	0.940	21.0	33.0
11/16/2012	133.38	89.08	44.30	192	131	58.0	<0.500	0.934	38.6	31.3
5/2/2013	135.54	90.11	45.43	161	124	53.6	<0.500	0.536	49.2	26.5
10/9/2013	135.54	93.74	41.80	169	118	36.9	<0.500	0.256 J	45.6	15.7
Field Point	MW6A		Well Screen Interval (feet):	80-110						
4/19/2011	136.53	94.53	42.00	830	290	900	7.2	<10	7.1 J	14
11/16/2011	136.53	88.79	47.74	500	150	110	<2.5	<5.0	28 J	29
5/3/2012	136.53	86.90	49.63	240	146	108	0.760	1.41	36.4	36.4
11/16/2012	136.53	88.52	48.01	197	132	60.2	<0.500	0.842	30.8	30.1
5/1/2013	136.53	90.81	45.72	182	125	67.6	<0.500	0.656	37.3	30.6
10/9/2013	136.53	94.28	42.25	188	123	51.8	<0.500	0.357 J	38.2	23.0
Field Point	MW6B		Well Screen Interval (feet):	130-140						
4/19/2011	136.54	93.89	42.65	130	97	100	0.48 J	<1.0	2.3 J	27

TABLE 2
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

DATE	Well Elev (feet-MSL)	GW Depth (feet-TOC)	GW Elev (feet-MSL)	PCE ($\mu\text{g/l}$)	TCE ($\mu\text{g/l}$)	DCE ($\mu\text{g/l}$)	Vinyl Chloride ($\mu\text{g/l}$)	1,1,1- Trichloroethane ($\mu\text{g/l}$)	1,1,2-Trichloro- 1,2,2- Trifluoroethane ($\mu\text{g/l}$)	1,1- Dichloroethane ($\mu\text{g/l}$)		
11/16/2011	136.54	88.06	48.48	1200	180	180	3.3	<1.0	3.2 J	23		
5/3/2012	136.54	86.30	50.24	307	146	95.6	1.05	<0.500	4.06	29.9		
11/16/2012	136.54	87.88	48.66	1480	255	82.0	1.97	<0.500	1.60	23.8		
5/1/2013	136.54	90.24	46.30	1650	322	347	5.42	<0.500	1.55	26.0		
10/9/2013	136.54	93.68	42.86	641	167	355	13.4	<0.500	1.84	20.3		
Field Point	MW6C	Well Screen Interval (feet): 170-180										
4/19/2011	136.53	93.23	43.30	1800	140	110	11	<1.0	<10	3.0		
4/19/2011 D		DUPLICATE SAMPLE INADVERTENTLY NOT TAKEN										
11/16/2011	136.53	87.38	49.15	1300	88	690	22	<10	<100	5.0 J		
11/16/2011 D	136.53	87.38	49.15	820	76	560	21	<10	<100	8.3 J		
5/3/2012	136.53	85.68	50.85	11.5	57.6	43.4	31.7	<0.500	<1.00	9.82		
5/3/2012 D	136.53	85.68	50.85	DUPLICATE SAMPLE INADVERTENTLY NOT TAKEN								
11/16/2012	136.53	87.26	49.27	192	66.2	56.3	5.23	<0.500	<1.00	11.4		
11/16/2012 D	136.53	87.26	49.27	218	68.9	56.6	5.47	<0.500	<1.00	11.5		
5/1/2013	136.53	89.64	46.89	69.2	101	58.7	13.4	<0.500	0.848 J	18.5		
5/1/2013 D	136.53			48.5	109	61.0	15.0	<0.500	0.969 J	20.5		
10/9/2013	136.53	93.10	43.43	359	68.3	70.1	8.01	<0.500	0.389 J	11.3		
10/9/2013 D	136.53			316	68.4	67.8	8.38	<0.500	0.351 J	11.2		
Field Point	MW7A	Well Screen Interval (feet): 80-110										
4/19/2011	138.22	94.64	43.58	110	73	41	0.61	<1.0	12	15		
11/16/2011	138.22	88.89	49.33	170	120	85	<0.50	0.99 J	25	31		
5/3/2012	138.22	86.80	51.42	191	139	71.9	0.480 J	1.40	35.9	34.5		
11/16/2012	138.22	88.64	49.58	161	106	47.0	<0.500	0.632	26.4	24.0		
5/1/2013	138.22	90.99	47.23	124	106	47.6	<0.500	0.448 J	30.6	21.5		
10/10/2013	138.22	94.34	43.88	89.9	92.9	32.8	0.738	<0.500	17.1	12.8		
Field Point	MW7B	Well Screen Interval (feet): 130-140										

TABLE 2
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

DATE	Well Elev (feet-MSL)	GW Depth (feet-TOC)	GW Elev (feet-MSL)	PCE ($\mu\text{g/l}$)	TCE ($\mu\text{g/l}$)	DCE ($\mu\text{g/l}$)	Vinyl Chloride ($\mu\text{g/l}$)	1,1,1- Trichloroethane ($\mu\text{g/l}$)	1,1,2-Trichloro- 1,2,2 Trifluoroethane ($\mu\text{g/l}$)	1,1- Dichloroethane ($\mu\text{g/l}$)
4/19/2011	138.14	94.12	44.02	50	34	27	<0.50	<1.0	4.2 J	11
11/16/2011	138.14	88.28	49.86	84	41	99	1.4	<1.0	7.1 J	17
5/3/2012	138.14	86.30	51.84	48.8	24.3	181	0.370 J	0.570	9.87	28.4
11/16/2012	138.14	88.09	50.05	106	44.9	94.9	0.697	0.209 J	3.47	19.9
5/1/2013	138.14	90.54	47.60	37.1	27.0	149	<0.500	<0.500	5.61	25.2
10/10/2013	138.14	93.96	44.18	100	109	37.3	0.314 J	<0.500	20.5	14.0
Field Point	MW7C	Well Screen Interval (feet): 165-175								
4/19/2011	138.22	94.26	43.96	9.9	5.2	4.8	<0.50	<1.0	1.0 J	1.3
11/16/2011	138.22	88.41	49.81	28	5.5	7.8	<0.50	<1.0	<10	1.2
5/3/2012	138.22	85.70	52.52	20.0	3.34	2.34	<0.500	<0.500	<1.00	0.730
11/16/2012	138.22	88.18	50.04	19.0	6.52	5.36	<0.500	<0.500	<1.00	1.38
5/1/2013	138.22	90.59	47.63	6.95	5.38	5.98	<0.500	<0.500	<1.00	1.59
10/10/2013	138.22	94.04	44.18	7.56	7.85	5.30	<0.500	<0.500	<1.00	1.42
Field Point	MW8A	Well Screen Interval (feet): 85-115								
4/19/2011	137.66	94.53	43.13	4.7	14	18	<0.50	<1.0	<10	1.1
11/16/2011	137.66	89.61	48.05	1.6	19	220	1.0	<1.0	<10	6.0
5/3/2012	137.66	87.60	50.06	<0.500	9.11	56.8	166	<0.500	<1.00	11.3
11/16/2012	137.66	137.66	NO PERMITTED ACCESS TO WELL							
5/2/2013	137.66	90.91	46.75	21.4	46.2	21.6	30.6	<0.500	1.12	11.9
10/10/2013	137.66	94.14	43.52	9.10	43.4	5.35	26.8	<0.500	1.18	8.60
Field Point	MW8B	Well Screen Interval (feet): 130-140								
4/19/2011	137.70	94.38	43.32	2.7	67	11	<0.50	<1.0	<10	2.0
11/16/2011	137.70	88.51	49.19	3.8	120	63	1.4	<1.0	<10	4.7
5/3/2012	137.70	86.80	50.90	0.430 J	54.2	127	14.8	<0.500	<1.00	5.64
11/16/2012	137.70	137.7	NO PERMITTED ACCESS TO WELL							
5/2/2013	137.70	90.19	47.51	7.64	132	42.0	4.77	<0.500	<1.00	4.72

TABLE 2
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

DATE	Well Elev (feet-MSL)	GW Depth (feet-TOC)	GW Elev (feet-MSL)	PCE ($\mu\text{g/l}$)	TCE ($\mu\text{g/l}$)	DCE ($\mu\text{g/l}$)	Vinyl Chloride ($\mu\text{g/l}$)	1,1,1- Trichloroethane ($\mu\text{g/l}$)	1,1,2-Trichloro- 1,2,2 Trifluoroethane ($\mu\text{g/l}$)	1,1- Dichloroethane ($\mu\text{g/l}$)	
10/10/2013	137.70	93.61	44.09	4.38	37.7	80.6	18.2	<0.500	<1.00	3.79	
Field Point MW8C Well Screen Interval (feet): 150-160											
4/19/2011	137.73	94.36	43.37	7.2	22	3.8	<0.50	<1.0	<10	0.93 J	
11/16/2011	137.73	88.54	49.19	9.7	78	78	0.76	<1.0	<10	4.7	
5/3/2012	137.73	86.50	51.23	1.41	22.4	129	24.6	<0.500	<1.00	6.47	
11/16/2012	137.73		137.73	NO PERMITTED ACCESS TO WELL							
5/2/2013	137.73	90.21	47.52	4.80	75.8	77.3	6.59	<0.500	<1.00	5.31	
10/10/2013	137.73	93.59	44.14	8.63	77.6	37.1	13.2	<0.500	<1.00	2.42	
Field Point MW9A Well Screen Interval (feet): 80-110.5											
11/17/2012	135.14	88.19	46.95	259	75.5	42.1	<0.500	0.707	12.8	22.2	
5/2/2013	135.14	90.53	44.61	192	116	65.1	<0.500	0.886	32.3	32.9	
10/9/2013	135.14	94.22	40.92	196	93.3	426	<0.500	0.423 J	27.2	19.8	
Field Point MW9B Well Screen Interval (feet): 140-150											
11/17/2012	135.18	86.19	48.99	155	107	57.7	<0.500	<0.500	2.97	24.9	
5/2/2013	135.18	88.56	46.62	161	60.5	115	0.565	<0.500	3.38	24.6	
10/9/2013	135.18	92.21	42.97	94.4	111	112	1.71	<0.500	3.64	21.5	
Field Point MW9C Well Screen Interval (feet): 175-185											
11/17/2012	135.38	87.35	48.03	29.7	30.3	21.3	<0.500	<0.500	<1.00	7.02	
5/2/2013	135.38	90.06	45.32	7.04	3.83	50.1	2.38	<0.500	<1.00	5.59	
10/9/2013	135.38	93.81	41.57	7.41	2.26	51.8	20.2	<0.500	<1.00	8.50	
Field Point MW10A Well Screen Interval (feet): 80-110											
11/16/2012	137.43	88.99	48.44	191	148	83.7	1.49	0.688	42.8	23.3	
5/1/2013	137.43	91.26	46.17	154	123	50.9	<0.500	0.470 J	47.8	22.9	
10/10/2013	137.43	94.71	42.72	141	103	39.8	0.441 J	<0.500	31.3	13.5	
Field Point MW10B Well Screen Interval (feet): 140-150											
11/16/2012	137.46	88.01	49.45	140	101	53.2	<0.500	0.197 J	18.0	21.2	

TABLE 2
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

DATE	Well Elev (feet-MSL)	GW Depth (feet-TOC)	GW Elev (feet-MSL)	PCE ($\mu\text{g/l}$)	TCE ($\mu\text{g/l}$)	DCE ($\mu\text{g/l}$)	Vinyl Chloride ($\mu\text{g/l}$)	1,1,1- Trichloroethane ($\mu\text{g/l}$)	1,1,2-Trichloro- 1,2,2- Trifluoroethane ($\mu\text{g/l}$)	1,1- Dichloroethane ($\mu\text{g/l}$)
5/1/2013	137.46	90.28	47.18	111	87.8	87.8	<0.500	<0.500	17.0	24.6
10/10/2013	137.46	93.79	43.67	98.3	91.9	79.5	<0.500	<0.500	12.9	17.4
Field Point MW10C Well Screen Interval (feet): 165-175										
11/16/2012	137.45	87.99	49.46	65.0	86.3	46.1	<0.500	<0.500	<1.00	10.1
5/1/2013	137.44	90.29	47.15	87.2	14.1	100	1.10	<0.500	<1.00	8.26
10/10/2013	137.44	93.71	43.73	29.0	4.99	105	16.4	<0.500	<1.00	5.76
Field Point TRIP BLANK Well Screen Interval (feet):										
10/14/2010				<1.0	<1.0	<1.0	<0.50	<1.0	<10	<1.0
4/19/2011				<1.0	<1.0	<1.0	<0.50	<1.0	<10	<1.0
11/16/2011				<1.0	<1.0	<1.0	<0.50	<1.0	<10	<1.0
5/3/2012				<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500
11/16/2012				<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500
11/17/2012				<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500
5/1/2013				<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500
5/2/2013				<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500
10/9/2013				<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500
10/10/2013				<0.500	<0.500	<0.500	<0.500	<0.500	<1.00	<0.500

TABLE 2
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

DATE	1,1- Dichloroethene ($\mu\text{g/l}$)	1,2,3- Trichlorobenzene ($\mu\text{g/l}$)	1,2,4- Trimethylbenzene ($\mu\text{g/l}$)	1,2- Dichloropropane ($\mu\text{g/l}$)	1,4- Dichlorobenzene ($\mu\text{g/l}$)	Acetone ($\mu\text{g/l}$)	Chloroform ($\mu\text{g/l}$)	Trichlorofluoro- methane ($\mu\text{g/l}$)
Field Point MMW-03 Well Screen Interval (feet):								
8/31/2000 (a)	6.5	ND	--	--	ND	--	--	--
3/5/2001 (a)	7.5	ND	<1.0	<1.0	ND	5.7 J	<1.0	<10
6/12/2001 (a)	9.9	ND	<1.0	1.4	ND	<10	<1.0	<10
12/31/2001 (a)(b)								
Field Point MMW-04 Well Screen Interval (feet): 60-105								
6/6/2000 (a)	--	--	--	--	--	--	--	--
8/31/2000 (a)	2	ND	--	--	ND	--	--	--
11/28/2000 (a)	--	--	--	--	--	--	--	--
3/5/2001 (a)	5.4	ND	ND<1.0	ND<1.0	ND	7.3 J	ND<1.0	ND<10
6/12/2001 (a)	4.7	ND	1.2	ND<1.0	ND	ND<10	ND<1.0	ND<10
12/23/2003 (a)	8.8	ND	ND<1.0	ND<1.0	ND	ND<10	ND<1.0	ND<10
12/21/2004 (a)	14	ND	ND<1.0	1.6	ND	ND<10	0.23 J	ND<10
12/2/2005 (a)	15	ND	ND<1.0	ND<1.0	ND	ND<10	ND<1.0	ND<10
12/19/2006 (a)	12	ND	ND<1.0	1.1	ND	11 J	ND<1.0	ND<10
12/21/2007 (a)	34	ND	ND<1.0	3	ND	ND<50	ND<1.0	ND<10
10/24/2008 (a)	45	0.36 J,B	ND<1.0	4.1	0.25 J	ND<50	1.30	0.82 J
9/22/2009 (a)	130	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<50	1.70	3.9 J
10/14/2010	57	<1.0	<1.0	<1.0	<1.0	<50	0.98 J	4.5 J
4/19/2011	68	<1.0	<1.0	<1.0	<1.0	<50	1.6	5.9 J
11/16/2011	72	<1.0	<1.0	1.5	<1.0	<20	2.2	4.9 J
5/3/2012	52.7	<0.500	<0.500	1.98	<0.500	<50.0	2.44	4.62
11/17/2012	74.3	<0.500	0.244 J	1.95	<0.500	<50.0	1.81	4.26
5/2/2013	67.4	<0.500	<0.500	1.67	<0.500	<50.0	2.16	4.65
10/10/2013	63.4	<0.500	<0.500	1.54	<0.500	<5.00	4.82	6.50
Field Point MMW-05 Well Screen Interval (feet): 61-106								
9/15/2000 (a)	ND<1.0	ND	--	--	ND	--	--	--
3/5/2001 (a)	61	ND	ND<5.0	ND<5.0	ND	62.00	ND<5.0	ND<50
6/12/2001 (a)	42	ND	ND<2.0	2.5	ND	ND<20	ND<2.0	ND<20
12/23/2003 (a)	190	ND	ND<1.0	2.5	ND	ND<10	1.6	ND<10
12/21/2004 (a)	370	ND	ND<10	ND<10	ND	ND<100	3.0 J	10 J
12/2/2005 (a)	220	ND	ND<1.0	ND<1.0	ND	ND<10	1.4	5.3 J

TABLE 2
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

DATE	1,1- Dichloroethene ($\mu\text{g/l}$)	1,2,3- Trichlorobenzene ($\mu\text{g/l}$)	1,2,4- Trimethylbenzene ($\mu\text{g/l}$)	1,2- Dichloropropane ($\mu\text{g/l}$)	1,4- Dichlorobenzene ($\mu\text{g/l}$)	Acetone ($\mu\text{g/l}$)	Chloroform ($\mu\text{g/l}$)	Trichlorofluoro- -methane ($\mu\text{g/l}$)
12/19/2006 (a)	240	ND	ND<1.0	1.8	ND	ND<50	1.4	7.1 J
12/21/2007 (a)	190	ND	ND<5.0	ND<5.0	ND	ND<250	ND<5.0	ND<50
10/24/2008 (a)	130	3.0 J,B	ND<5.0	ND<5.0	1.2 J	ND<250	1.8 J	6.6 J
9/22/2009 (a)	190	ND<1.0	ND<1.0	ND<1.0	ND<1.0	ND<250	1.5	7.4 J
10/14/2010	150	<1.0	0.38 J	<1.0	<1.0	<50	1.7	5.9 J
4/19/2011	110	<1.0	<1.0	<1.0	<1.0	<50	2.2	6.2 J
11/16/2011	130	<2.0	<2.0	<2.0	<2.0	<40	5.3	8.4 J
5/3/2012	122	<0.500	<0.500	<0.500	<0.500	<50.0	6.15	7.71
11/16/2012	166	<0.500	<0.500	0.392 J	<0.500	<50.0	9.40	15.1
5/2/2013	130	<0.500	<0.500	0.470 J	<0.500	<50.0	10.5	23.2
10/9/2013	92.7	<0.500	<0.500	0.439 J	<0.500	<5.00	8.42	17.6
Field Point	MW6A	Well Screen Interval (feet): 80-110						
4/19/2011	70	<10	<10	<10	<10	<500	<10	<100
11/16/2011	130	<5.0	<5.0	<5.0	<5.0	<100	3.6 J	11 J
5/3/2012	149	<0.500	<0.500	0.510	<0.500	<50.0	7.93	14.7
11/16/2012	165	<0.500	0.334 J	0.265 J	<0.500	<50.0	7.73	12.8
5/1/2013	140	<0.500	0.356 J	<0.500	<0.500	<50.0	10.9	19.3
10/9/2013	119	<0.500	<0.500	0.410 J	<0.500	12.3	9.59	16.4
Field Point	MW6B	Well Screen Interval (feet): 130-140						
4/19/2011	150	<1.0	0.37 J	<1.0	<1.0	<50	0.34 J	<10
11/16/2011	74	<1.0	<1.0	<1.0	<1.0	<20	0.98 J	<10
5/3/2012	150	<0.500	<0.500	0.340 J	<0.500	<50.0	0.600	<0.500
11/16/2012	126	<0.500	<0.500	<0.500	<0.500	<50.0	<0.500	<0.500
5/1/2013	104	<0.500	<0.500	0.295 J	<0.500	<50.0	0.418 J	<0.500
10/9/2013	73.8	<0.500	<0.500	0.255 J	<0.500	<5.00	0.519	0.357 J
Field Point	MW6C	Well Screen Interval (feet): 170-180						
4/19/2011	18	<1.0	1.2	<1.0	<1.0	<50	3.2	<10
4/19/2011 D								
11/16/2011	23	<10	<10	<10	<10	<200	<10	<100
11/16/2011 D	44	<10	<10	<10	<10	<200	<10	<100
5/3/2012	38.0	<0.500	<0.500	0.500	<0.500	<50.0	<0.500	<0.500
5/3/2012 D								

TABLE 2
CUMULATIVE WATER LEVEL MEASUREMENTS AND GROUNDWATER ANALYSES
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SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

DATE	1,1- Dichloroethene ($\mu\text{g/l}$)	1,2,3- Trichlorobenzene ($\mu\text{g/l}$)	1,2,4- Trimethylbenzene ($\mu\text{g/l}$)	1,2- Dichloropropane ($\mu\text{g/l}$)	1,4- Dichlorobenzene ($\mu\text{g/l}$)	Acetone ($\mu\text{g/l}$)	Chloroform ($\mu\text{g/l}$)	Trichlorofluoro- -methane ($\mu\text{g/l}$)
11/16/2012	38.5	<0.500	<0.500	0.346 J	<0.500	<50.0	<0.500	<0.500
11/16/2012 D	40.3	<0.500	<0.500	0.286 J	<0.500	14.4 J	<0.500	<0.500
5/1/2013	125	<0.500	0.216 J	0.379 J	<0.500	<50.0	<0.500	<0.500
5/1/2013 D	137	<0.500	0.252 J	0.393 J	<0.500	<50.0	<0.500	<0.500
10/9/2013	39.3	<0.500	<0.500	0.382 J	<0.500	<5.00	<0.500	<0.500
10/9/2013 D	38.0	<0.500	<0.500	0.367 J	<0.500	<5.00	<0.500	<0.500
Field Point MW7A	Well Screen Interval (feet): 80-110							
4/19/2011	70	<1.0	<1.0	<1.0	<1.0	<50	2.2	3.7 J
11/16/2011	120	<1.0	<1.0	<1.0	<1.0	<20	5.0	11
5/3/2012	135	<0.500	<0.500	0.420 J	<0.500	<50.0	9.05	15.2
11/16/2012	123	<0.500	0.247 J	<0.500	<0.500	<50.0	6.75	12.2
5/1/2013	101	<0.500	0.312 J	0.322 J	<0.500	<50.0	10.3	15.4
10/10/2013	70.8	<0.500	0.299 J	<0.500	<0.500	<5.00	5.20	7.99
Field Point MW7B	Well Screen Interval (feet): 130-140							
4/19/2011	38	<1.0	0.60 J	<1.0	<1.0	<50	1.3	0.82 J
11/16/2011	52	<1.0	1.4	<1.0	<1.0	<20	2.1	<10
5/3/2012	93.5	<0.500	<0.500	0.280 J	<0.500	<50.0	2.55	0.540
11/16/2012	75.0	<0.500	0.201 J	<0.500	<0.500	<50.0	1.52	<0.500
5/1/2013	77.3	<0.500	<0.500	<0.500	<0.500	8.66 J	2.63	1.62
10/10/2013	80.8	<0.500	<0.500	<0.500	<0.500	<5.00	3.33	5.19
Field Point MW7C	Well Screen Interval (feet): 165-175							
4/19/2011	5.6	<1.0	0.40 J	<1.0	<1.0	<50	0.84 J	<10
11/16/2011	2.6	<1.0	0.69 J	<1.0	<1.0	<20	<1.0	<10
5/3/2012	1.18	<0.500	<0.500	<0.500	<0.500	<50.0	<0.500	<0.500
11/16/2012	6.90	<0.500	<0.500	<0.500	<0.500	<50.0	<0.500	<0.500
5/1/2013	8.80	<0.500	<0.500	<0.500	<0.500	<50.0	<0.500	<0.500
10/10/2013	9.87	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500
Field Point MW8A	Well Screen Interval (feet): 85-115							
4/19/2011	11	<1.0	19	<1.0	<1.0	<50	6.1	<10
11/16/2011	80	<1.0	3.0	<1.0	<1.0	<20	<1.0	<10
5/3/2012	17.2	<0.500	2.08	<0.500	<0.500	<50.0	<0.500	<0.500

TABLE 2
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FORMER EXXONMOBIL JALK FEE PROPERTY
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SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

DATE	1,1- Dichloroethene ($\mu\text{g/l}$)	1,2,3- Trichlorobenzene ($\mu\text{g/l}$)	1,2,4- Trimethylbenzene ($\mu\text{g/l}$)	1,2- Dichloropropane ($\mu\text{g/l}$)	1,4- Dichlorobenzene ($\mu\text{g/l}$)	Acetone ($\mu\text{g/l}$)	Chloroform ($\mu\text{g/l}$)	Trichlorofluoro- methane ($\mu\text{g/l}$)
11/16/2012	NO PERMITTED ACCESS TO WELL I							
5/2/2013	21.8	<0.500	0.610	<0.500	<0.500	<50.0	0.294 J	<0.500
10/10/2013	19.2	<0.500	0.248 J	<0.500	<0.500	<5.00	<0.500	<0.500
Field Point	MW8B	Well Screen Interval (feet): 130-140						
4/19/2011	33	<1.0	1.6	<1.0	<1.0	29 J	8.8	<10
11/16/2011	57	<1.0	2.1	<1.0	<1.0	<20	<1.0	<10
5/3/2012	78.2	<0.500	<0.500	<0.500	<0.500	<50.0	<0.500	<0.500
11/16/2012	NO PERMITTED ACCESS TO WELL I							
5/2/2013	65.9	<0.500	<0.500	<0.500	<0.500	<50.0	<0.500	<0.500
10/10/2013	53.7	<0.500	0.430 J	<0.500	<0.500	<5.00	<0.500	<0.500
Field Point	MW8C	Well Screen Interval (feet): 150-160						
4/19/2011	15	<1.0	1.5	<1.0	<1.0	65	13	<10
11/16/2011	60	<1.0	2.5	<1.0	<1.0	20	<1.0	<10
5/3/2012	87.3	<0.500	<0.500	<0.500	<0.500	<50.0	<0.500	<0.500
11/16/2012	NO PERMITTED ACCESS TO WELL I							
5/2/2013	63.7	<0.500	<0.500	<0.500	<0.500	<50.0	<0.500	<0.500
10/10/2013	42.9	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500
Field Point	MW9A	Well Screen Interval (feet): 80-110.5						
11/17/2012	82.2	<0.500	<0.500	0.510	<0.500	<50.0	4.30	5.09
5/2/2013	138	<0.500	<0.500	0.459 J	<0.500	3.91J	9.88	20.1
10/9/2013	76.5	<0.500	<0.500	0.468 J	<0.500	10.3	7.59	12.6
Field Point	MW9B	Well Screen Interval (feet): 140-150						
11/17/2012	168	<0.500	<0.500	<0.500	<0.500	<50.0	0.380 J	<0.500
5/2/2013	119	<0.500	<0.500	<0.500	<0.500	<50.0	0.897	0.335 J
10/9/2013	97.8	<0.500	<0.500	<0.500	<0.500	<5.00	0.734	0.501
Field Point	MW9C	Well Screen Interval (feet): 175-185						
11/17/2012	53.2	<0.500	<0.500	<0.500	<0.500	<50.0	<0.500	<0.500
5/2/2013	38.2	<0.500	<0.500	<0.500	<0.500	<50.0	<0.500	<0.500
10/9/2013	42.2	<0.500	<0.500	0.351 J	<0.500	<5.00	<0.500	<0.500
Field Point	MW10A	Well Screen Interval (feet): 80-110						

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 CARDNO ERI 1155

DATE	1,1- Dichloroethene ($\mu\text{g/l}$)	1,2,3- Trichlorobenzene ($\mu\text{g/l}$)	1,2,4- Trimethylbenzene ($\mu\text{g/l}$)	1,2- Dichloropropane ($\mu\text{g/l}$)	1,4- Dichlorobenzene ($\mu\text{g/l}$)	Acetone ($\mu\text{g/l}$)	Chloroform ($\mu\text{g/l}$)	Trichlorofluoro- -methane ($\mu\text{g/l}$)
11/16/2012	141	<0.500	<0.500	<0.500	<0.500	<50.0	11.6	16.1
5/1/2013	120	<0.500	0.209 J	0.331 J	<0.500	<50.0	11.0	20.8
10/10/2013	89.2	<0.500	<0.500	0.286 J	<0.500	<5.00	6.33	12.1
Field Point	MW10B	Well Screen Interval (feet): 140-150						
11/16/2012	105	<0.500	<0.500	<0.500	<0.500	<50.0	4.34	3.27
5/1/2013	118	<0.500	<0.500	<0.500	<0.500	<50.0	4.22	3.02
10/10/2013	117	<0.500	<0.500	<0.500	<0.500	<5.00	2.97	1.79
Field Point	MW10C	Well Screen Interval (feet): 165-175						
11/16/2012	109	<0.500	<0.500	<0.500	<0.500	<50.0	<0.500	<0.500
5/1/2013	86.6	<0.500	<0.500	0.334 J	<0.500	<50.0	0.232 J	<0.500
10/10/2013	49.6	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500
Field Point	TRIP BLANK	Well Screen Interval (feet):						
10/14/2010	<1.0	<1.0	<1.0	<1.0	<1.0	<50	<1.0	<10
4/19/2011	<1.0	<1.0	<1.0	<1.0	<1.0	<50	<1.0	<10
11/16/2011	<1.0	<1.0	<1.0	<1.0	<1.0	<20	<1.0	<10
5/3/2012	<0.500	<0.500	<0.500	<0.500	<0.500	<50.0	<0.500	<0.500
11/16/2012	<0.500	<0.500	<0.500	<0.500	<0.500	<50.0	<0.500	<0.500
11/17/2012	<0.500	<0.500	<0.500	<0.500	<0.500	<50.0	<0.500	<0.500
5/1/2013	<0.500	<0.500	<0.500	<0.500	<0.500	<50.0	<0.500	<0.500
5/2/2013	<0.500	<0.500	<0.500	<0.500	<0.500	<50.0	<0.500	<0.500
10/9/2013	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500
10/10/2013	<0.500	<0.500	<0.500	<0.500	<0.500	<5.00	<0.500	<0.500

TABLE 2
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FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

EXPLANATION:

Constituents analyzed by EPA Method 8260B.

(a) = values supplied by previous consultant

(b) = date of well abandonment not known

D = duplicate

ELEV = elevation

GW = groundwater

feet-MSL = feet above mean sea level

feet-TOC = feet below top of casing

NAPL = non-aqueous phase liquid (thickness measured in feet)

EPA = Environmental Protection Agency

DCE = c-1,2-Dichloroethene

PCE = Tetrachloroethene or perchloroethylene

TCE = Trichloroethene

J = estimated value between method detection limit and practical quantitation limit

ND = not detected at or above the stated laboratory reporting limit

< = not detected at or above the stated laboratory reporting limit

µg/l = micrograms per liter

TABLE 3
SUMMARY OF BTEX AND FUEL OXYGENATES GROUNDWATER MONITORING RESULTS
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

Date	Well Elev (feet-MSL)	GW Depth (feet-TOC)	GW Elev (feet-MSL)	NAPL (feet)	Benzene (ug/l)	Toluene (ug/l)	Ethyl- benzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TPHg (ug/l)	TPHd (ug/l)	TPHo (ug/l)	EDB (ug/l)	EDC (ug/l)
Field Point	MMW-04	Well Screen Interval (feet): 60-105												
10/10/2013	133.14	92.77	40.37	no	<0.500	<0.500	<0.500	<1.50	<0.500	104	161 J	<490	<0.500	1.96
Field Point	MMW-05	Well Screen Interval (feet): 61-106												
10/9/2013	135.54	93.74	41.80	no	<0.500	<0.500	<0.500	<1.50	0.301 J	159	263 J	70.1 J	<0.500	2.91
Field Point	MW6A	Well Screen Interval (feet): 80-110												
10/9/2013	136.53	94.28	42.25	no	<0.500	<0.500	<0.500	<1.50	0.329 J	200	695	297 J	<0.500	4.17
Field Point	MW6B	Well Screen Interval (feet): 130-140												
10/9/2013	136.54	93.68	42.86	no	0.369 J	<0.500	<0.500	<1.50	0.210 J	525	1650	731	<0.500	4.96
Field Point	MW6C	Well Screen Interval (feet): 170-180												
10/9/2013	136.53	93.1	43.43	no	0.213 J	<0.500	<0.500	<1.50	<0.500	198	1250	637	<0.500	2.66
10/9/2013 D	136.53			no	0.221 J	<0.500	<0.500	<1.50	<0.500	200	1070	550	<0.500	2.62
Field Point	MW7A	Well Screen Interval (feet): 80-110												
10/10/2013	138.22	94.34	43.88	no	<0.500	<0.500	<0.500	<1.50	0.293 J	145	382 J	125 J	<0.500	2.21
Field Point	MW7B	Well Screen Interval (feet): 130-140												
10/10/2013	138.14	93.96	44.18	no	<0.500	<0.500	<0.500	<1.50	0.270 J	170	352 J	140 J	<0.500	2.35
Field Point	MW7C	Well Screen Interval (feet): 165-175												
10/10/2013	138.22	94.04	44.18	no	<0.500	<0.500	<0.500	<1.50	<0.500	<50.0	93.7 J	<490	<0.500	0.330 J
Field Point	MW8A	Well Screen Interval (feet): 85-115												
10/10/2013	137.66	94.14	43.52	no	0.633	<0.500	0.522	<1.50	<0.500	510	376 J	145 J	<0.500	<0.500
Field Point	MW8B	Well Screen Interval (feet): 130-140												
10/10/2013	137.70	93.61	44.09	no	<0.500	<0.500	13.6	<1.50	<0.500	2400	644	249 J	<0.500	<0.500
Field Point	MW8C	Well Screen Interval (feet): 150-160												
10/10/2013	137.73	93.59	44.14	no	<0.500	<0.500	0.500	<1.50	<0.500	350	731	264 J	<0.500	<0.500
Field Point	MW9A	Well Screen Interval (feet): 80-110.5												
10/10/2013	135.14	94.22	40.92	no	<0.500	<0.500	<0.500	<1.50	1.24	173	189 J	82.7 J	<0.500	3.44
Field Point	MW9B	Well Screen Interval (feet): 140-150												
10/10/2013	135.18	92.21	42.97	no	<0.500	<0.500	<0.500	<1.50	0.199 J	163	182 J	59.0 J	<0.500	5.23

TABLE 3
SUMMARY OF BTEX AND FUEL OXYGENATES GROUNDWATER MONITORING RESULTS
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

Date	Well Elev (feet-MSL)	GW Depth (feet-TOC)	GW Elev (feet-MSL)	NAPL (feet)	Benzene (ug/l)	Toluene (ug/l)	Ethyl- benzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TPHg (ug/l)	TPHd (ug/l)	TPHo (ug/l)	EDB (ug/l)	EDC (ug/l)
Field Point	MW9C	Well Screen Interval (feet): 175-185												
10/10/2013	135.38	93.81	41.57	no	<0.500	<0.500	<0.500	<1.50	<0.500	51.2	637	557	<0.500	1.94
Field Point	MW10A	Well Screen Interval (feet): 80-110												
10/10/2013	137.43	94.71	42.72	no	<0.500	<0.500	<0.500	<1.50	0.229 J	185	310 J	93.7 J	<0.500	2.55
Field Point	MW10B	Well Screen Interval (feet): 140-150												
10/10/2013	137.46	93.79	43.67	no	<0.500	<0.500	<0.500	<1.50	<0.500	214	348 J	221 J	<0.500	3.46
Field Point	MW10C	Well Screen Interval (feet): 165-175												
10/10/2013	137.44	93.71	43.73	no	0.279 J	<0.500	<0.500	<1.50	<0.500	104	227 J	83.0 J	<0.500	1.28
Field Point	TRIP BLANK	Well Screen Interval (feet):												
10/9/2013				no	<0.500	<0.500	<0.500	<1.50	<0.500				<0.500	<0.500
10/10/2013				no	<0.500	<0.500	<0.500	<1.50	<0.500				<0.500	<0.500

TABLE 3
SUMMARY OF BTEX AND FUEL OXYGENATES GROUNDWATER MONITORING RESULTS
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

Explanation:

BTEX = Benzene, toluene, ethylbenzene, and total xylenes

DUP = duplicate sample

ELEV = elevation

EPA = Environmental Protection Agency

GW = groundwater

DIPE = di-isopropyl ether

EDB = 1,2-dibromoethane

EDC = 1,2-dichloroethane

ETBE = ethyl tertiary butyl ether

MTBE = methyl tertiary butyl ether

MTBE analyzed by EPA Method 8260B

NAPL = non-aqueous phase liquid (thickness measured in feet)

TAME = tertiary amyl methyl ether

TBA = tertiary butyl alcohol

TPHg = total petroleum hydrocarbons as gasoline [called Gasoline Range Organics (C4-C12) in laboratory reports]

TPHd = total petroleum hydrocarbons as diesel [called Petroleum Hydrocarbons C10-C28 in laboratory reports]

TPHo = total petroleum hydrocarbons as oil [called Petroleum Hydrocarbons C24-C40 in laboratory reports]

J = estimated value between method detection limit and practical quantitation limit

< = not detected at or above stated laboratory reporting limit

(c) = pre-purge sample taken at top of water column before well was purged

feet-MSL = feet above mean sea level

feet-TOC = feet below top of casing

ug/l = micrograms per liter

Environmental Resolutions, Inc. (ERI) became known as Cardno ERI on October 18, 2010

TABLE 4
CUMULATIVE HYDROCARBON GROUNDWATER MONITORING RESULTS
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

Date	Well Elev (feet-MSL)	GW Depth (feet-TOC)	GW Elev (feet-MSL)	NAPL (feet)	Benzene (ug/l)	Toluene (ug/l)	Ethyl- benzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TPHg (ug/l)	TPHd (ug/l)	TPHo (ug/l)	EDB (ug/l)	EDC (ug/l)
Field Point MMW-03 Well Screen Interval (feet):														
6/6/2000 (a)	134.26	70.69	63.57	no	<0.50	<1.0	<1.0	<2.0	<1.0	<500	--	--	--	--
8/31/2000 (a)	134.26	70.67	63.59	no	<0.50	<1.0	<1.0	<2.0	1.9	<500	--	--	<0.50	--
11/28/2000(a)	134.26	71.49	62.77	no	<0.50	<1.0	<1.0	<2.0	7	--	--	--	0.97	--
3/5/2001 (a)	134.26	71.30	62.96	no	<0.50	<1.0	<1.0	<2.0	7.6	--	--	--	--	--
6/12/2001 (a)	134.26	70.07	64.19	no	3.7	5.7	1.4	5.3	13	--	--	--	--	--
12/31/2001(a)(b)				no	WELL ABANDONED									
Field Point MMW-04 Well Screen Interval (feet): 60-105														
6/6/2000 (a)	131.40	70.46	60.94	no	ND<0.50	ND<1.0	ND<1.0	ND<2.0	ND<1.0	ND<500	--	--	--	--
8/31/2000 (a)	131.40	70.58	60.82	no	ND<0.50	ND<1.0	ND<1.0	ND<2.0	ND<1.0	ND<500	--	--	--	--
11/28/2000(a)	131.40	71.28	60.12	no	ND<0.50	ND<1.0	ND<1.0	ND<2.0	ND<1.0	--	--	--	--	--
3/5/2001 (a)	131.40	71.02	60.38	no	ND<0.50	ND<1.0	ND<1.0	ND<2.0	ND<1.0	--	--	--	--	--
6/12/2001 (a)	131.40	69.81	61.59	no	13	12	2.1	7.9	1.2	--	--	--	--	--
12/23/2003(a)	131.40	78.38	53.02	no	ND<0.50	ND<1.0	ND<1.0	ND<2.0	ND<1.0	--	--	--	--	--
12/21/2004(a)	131.40	84.73	46.67	no	ND<0.50	ND<1.0	ND<1.0	ND<2.0	ND<1.0	--	--	--	--	--
12/2/2005 (a)	131.40	79.01	52.39	no	ND<0.50	ND<1.0	ND<1.0	ND<2.0	ND<1.0	--	--	--	--	--
12/19/2006(a)	131.40	76.66	54.74	no	ND<0.50	0.54 J	ND<1.0	ND<1.0	ND<1.0	--	--	--	--	--
12/21/2007(a)	131.40	79.73	51.67	no	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	--	--	--	--
10/24/2008(a)	131.40	84.13	47.27	no	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--	--	--	--	--
9/22/2009 (a)	131.40	91.00	40.40	no	ND<0.50	ND<1.0	ND<1.0	ND<1.0	0.35 J	--	--	--	--	--
10/14/2010	131.40	94.25	37.15	no	<0.50	<0.50	<0.50	<0.50	<1.0	--	<1.0	--	<1.0	<0.50
4/19/2011	131.40	91.75	39.65	no	0.29 J	<0.50	0.24 J	<0.50	0.38 J	--	<1.0	--	<1.0	3.3

TABLE 4
CUMULATIVE HYDROCARBON GROUNDWATER MONITORING RESULTS
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

Date	Well Elev (feet-MSL)	GW Depth (feet-TOC)	GW Elev (feet-MSL)	NAPL (feet)	Benzene (ug/l)	Toluene (ug/l)	Ethyl- benzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TPHg (ug/l)	TPHd (ug/l)	TPHo (ug/l)	EDB (ug/l)	EDC (ug/l)
4/19/2011 D	131.40	91.75	39.65	no	DUPLICATE SAMPLE INADVERTENTLY NOT TAKEN									
11/16/2011	131.40	86.13	45.27	no	0.41 J	1.0	0.30 J	<0.50	<1.0				<1.0	2.8
3/8/2012	131.40			no	NOT MEASURED OR SAMPLED									
5/3/2012	131.40	84.10	47.30	no	1.79	<0.500	0.600	0.760	<1.00				<0.500	1.69
11/17/2012	133.14	86.59	46.55	no	<0.500	<0.500	<0.500	<0.500	<1.00	130	<1000	98.1 J	<0.500	1.26
5/2/2013	133.14	88.81	44.33	no	<0.500	<0.500	<0.500	<0.500	0.194 J	101	77.2 J	55.3 J	<0.500	2.08
10/10/2013	133.14	92.77	40.37	no	<0.500	<0.500	<0.500	<1.50	<0.500	104	161 J	<490	<0.500	1.96
Field Point	MMW-05	Well Screen Interval (feet): 61-106												
6/6/2000 (a)	133.38	71.79	61.59	no	ND<2.5	ND<5.0	ND<5.0	ND<10	ND<5.0	ND<500				
8/31/2000 (a)	133.38	71.86	61.52	no	ND<2.5	ND<5.0	ND<5	ND<10	ND<5	136				
11/28/2000(a)	133.38	72.58	60.80	no	ND<2.5	ND<5.0	ND<5	ND<10	ND<5	--				
3/5/2001 (a)	133.38	72.47	60.91	no	ND<2.5	ND<5.0	ND<5.0	ND<10	ND<5.0	--				
6/12/2001 (a)	133.38	71.29	62.09	no	1.3	2.3	ND<2.0	ND<4.0	ND<2.0	--				
12/23/2003(a)	133.38	79.72	53.66	no	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--				
12/21/2004(a)	133.38	86.02	47.36	no	ND<5.0	ND<10	ND<10	ND<10	ND<10	--				
12/2/2005 (a)	133.38	80.69	52.69	no	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--				
12/19/2006(a)	133.38	78.29	55.09	no	ND<0.50	0.64 J	ND<1.0	ND<1.0	ND<1.0	--				
12/21/2007(a)	133.38	80.94	52.44	no	ND<2.5#	ND<5.0	ND<5.0	ND<5.0	ND<5.0	--				
10/24/2008(a)	133.38	85.19	48.19	no	ND<2.5#	ND<5.0	ND<5.0	ND<5.0	ND<5.0	--				
9/22/2009 (a)	133.38	92.10	41.28	no	ND<0.50	ND<1.0	ND<1.0	ND<1.0	ND<1.0	--				
10/14/2010	133.38	96.85	36.53	no	9.3	0.96	1.1	2.4	0.89 J				<1.0	5.5
4/19/2011	133.38	95.05	38.33	no	0.53	<0.50	0.54	0.85	<1.0				<1.0	4.3

TABLE 4
CUMULATIVE HYDROCARBON GROUNDWATER MONITORING RESULTS
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

Date	Well Elev (feet-MSL)	GW Depth (feet-TOC)	GW Elev (feet-MSL)	NAPL (feet)	Benzene (ug/l)	Toluene (ug/l)	Ethyl- benzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TPHg (ug/l)	TPHd (ug/l)	TPHo (ug/l)	EDB (ug/l)	EDC (ug/l)
11/16/2011	133.38	89.24	44.14	no	0.29 J	<1.0	<1.0	<1.0	<2.0				<2.0	5.4
3/8/2012	133.38			no	NOT MEASURED OR SAMPLED									
5/3/2012	133.38	85.80	47.58	no	2.71	<0.500	0.730	0.840	0.380 J				<0.500	5.58
11/16/2012	135.54	89.08	46.46	no	<0.500	<0.500	<0.500	<0.500	<1.00	285	<909	64.9 J	<0.500	4.15
5/2/2013	135.54	90.11	45.43	no	<0.500	<0.500	<0.500	<0.500	0.485 J	204	54.5 J	35.0 J	<0.500	4.77
10/9/2013	135.54	93.74	41.80	no	<0.500	<0.500	<0.500	<1.50	0.301 J	159	263 J	70.1 J	<0.500	2.91
Field Point	MW6A	Well Screen Interval (feet): 80-110												
4/19/2011	136.53	94.53	42.00	no	<5.0	<5.0	<5.0	<5.0	<10				<10	<5.0
11/16/2011	136.53	88.79	47.74	no	<2.5	<2.5	<2.5	<2.5	<5.0				<5.0	5.3
3/8/2012	136.53	87.04	49.49	no	GAUGE ONLY									
5/3/2012	136.53	86.90	49.63	no	<0.500	<0.500	<0.500	<0.500	0.440 J				<0.500	6.42
11/16/2012	136.53	88.52	48.01	no	<0.500	<0.500	<0.500	<0.500	0.408 J	250	<909	<909	<0.500	4.54
5/1/2013	136.53	90.81	45.72	no	0.240 J	<0.500	<0.500	0.442 J	<0.500	223	109 J	76.9 J	<0.500	5.29
10/9/2013	136.53	94.28	42.25	no	<0.500	<0.500	<0.500	<1.50	0.329 J	200	695	297 J	<0.500	4.17
Field Point	MW6B	Well Screen Interval (feet): 130-140												
4/19/2011	136.54	93.89	42.65	no	0.83	<0.50	1.1	1.7	<1.0				<1.0	5.4
11/16/2011	136.54	88.06	48.48	no	2.5	5.8	1.3	1.6	<1.0				<1.0	5.1
3/8/2012	136.54	86.39	50.15	no	GAUGE ONLY									
5/3/2012	136.54	86.30	50.24	no	<0.500	<0.500	<0.500	<0.500	0.270 J				<0.500	6.46
11/16/2012	136.54	87.88	48.66	no	0.445 J	<0.500	<0.500	<0.500	<1.00	712	584 J	640 J	<0.500	4.40
5/1/2013	136.54	90.24	46.30	no	0.552	<0.500	<0.500	<0.500	0.311 J	856	404 J	321 J	<0.500	6.13
10/9/2013	136.54	93.68	42.86	no	0.369 J	<0.500	<0.500	<1.50	0.210 J	525	1650	731	<0.500	4.96

TABLE 4
CUMULATIVE HYDROCARBON GROUNDWATER MONITORING RESULTS
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

Date	Well Elev (feet-MSL)	GW Depth (feet-TOC)	GW Elev (feet-MSL)	NAPL (feet)	Benzene (ug/l)	Toluene (ug/l)	Ethyl- benzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TPHg (ug/l)	TPHd (ug/l)	TPHo (ug/l)	EDB (ug/l)	EDC (ug/l)
Field Point	MW6C	Well Screen Interval (feet): 170-180												
4/19/2011	136.53	93.23	43.30	no	1.4	2.2	1.3	3.8	<1.0				<1.0	0.76
11/16/2011 D	136.53	87.38	49.15	no	3.6 J	9.2	2.1 J	<5.0	<10				<10	<5.0
11/16/2011	136.53	87.38	49.15	no	5.8	14	3.4 J	3.6 J	<10				<10	<5.0
3/8/2012 (c)	136.53			no	0.320 J	0.250 J	<0.500	<0.500					<0.500	<0.500
3/8/2012	136.53	85.74	50.79	no	0.980	0.840	0.340 J	0.930					<0.500	<0.500
3/8/2012 (d)	136.53			no	<0.500	<0.500	<0.500	<0.500					<0.500	1.63
5/3/2012 D	136.53	85.68	50.85	no	DUPLICATE SAMPLE INADVERTANTLY NOT TAKEN									
5/3/2012	136.53	85.68	50.85	no	<0.500	<0.500	<0.500	<0.500	<1.00				<0.500	2.01
11/16/2012	136.53	87.26	49.27	no	<0.500	<0.500	<0.500	<0.500	<1.00	198	574 J	705 J	<0.500	2.07
11/16/2012 D	136.53	87.26	49.27	no	<0.500	<0.500	<0.500	<0.500	<1.00	184	704 J	385 J	<0.500	2.14
5/1/2013 D	136.53			no	<0.500	<0.500	<0.500	0.327 J	0.141 J	225	549	503	<0.500	4.40
5/1/2013	136.53	89.64	46.89	no	<0.500	<0.500	<0.500	0.303 J	0.140 J	222	608	544	<0.500	4.04
10/9/2013 D	136.53			no	0.221 J	<0.500	<0.500	<1.50	<0.500	200	1070	550	<0.500	2.62
10/9/2013	136.53	93.1	43.43	no	0.213 J	<0.500	<0.500	<1.50	<0.500	198	1250	637	<0.500	2.66
Field Point	MW7A	Well Screen Interval (feet): 80-110												
4/19/2011	138.22	94.64	43.58	no	<0.50	3.7	<0.50	<0.50	<1.0				<1.0	<3.0
11/16/2011	138.22	88.89	49.33	no	0.32 J	5.7	<0.50	<0.50	0.39 J				<1.0	5.1
3/8/2012	138.22	87.23	50.99	no	GAUGE ONLY									
5/3/2012	138.22	86.80	51.42	no	<0.500	<0.500	<0.500	<0.500	0.490 J				<0.500	5.95
11/16/2012	138.22	88.64	49.58	no	<0.500	<0.500	<0.500	<0.500	<1.00	212	78.4 J	79.3 J	<0.500	3.66
5/1/2013	138.22	90.99	47.23	no	0.248 J	<0.500	<0.500	0.403 J	0.694	173	157 J	109 J	<0.500	4.02

TABLE 4
CUMULATIVE HYDROCARBON GROUNDWATER MONITORING RESULTS
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

Date	Well Elev (feet-MSL)	GW Depth (feet-TOC)	GW Elev (feet-MSL)	NAPL (feet)	Benzene (ug/l)	Toluene (ug/l)	Ethyl- benzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TPHg (ug/l)	TPHd (ug/l)	TPHo (ug/l)	EDB (ug/l)	EDC (ug/l)
10/10/2013	138.22	94.34	43.88	no	<0.500	<0.500	<0.500	<1.50	0.293 J	145	382 J	125 J	<0.500	2.21
Field Point MW7B Well Screen Interval (feet): 130-140														
4/19/2011	138.14	94.12	44.02	no	2.1	25	0.74	3.3	<1.0				<1.0	<2.2
11/16/2011	138.14	88.28	49.86	no	4.6	25	1.3	4.3	<1.0				<1.0	3.2
3/8/2012	138.14	86.61	51.23	no	GAUGE ONLY									
5/3/2012	138.14	86.30	51.84	no	0.490 J	0.320 J	<0.500	<0.500	0.320 J				<0.500	4.67
11/16/2012	138.14	88.09	50.05	no	0.376 J	0.338 J	<0.500	<0.500	<1.00	208	562 J	366 J	<0.500	3.49
5/1/2013	138.14	90.54	47.60	no	0.360 J	0.271 J	<0.500	0.286 J	0.319 J	169	1370	1150	<0.500	4.75
10/10/2013	138.14	93.96	44.18	no	<0.500	<0.500	<0.500	<1.50	0.270 J	170	352 J	140 J	<0.500	2.35
Field Point MW7C Well Screen Interval (feet): 165-175														
4/19/2011	138.22	94.26	43.96	no	2.1	35	0.65	2.9	<1.0				<1.0	0.34 J
11/16/2011	138.22	88.41	49.81	no	3.2	13	0.80	2.5	<1.0				<1.0	<0.50
3/8/2012	138.22	86.77	51.45	no	0.840	1.84	0.340 J	0.920					<0.500	<0.500
3/8/2012 (c)	138.22			no	<0.500	<0.500	<0.500	<0.500					<0.500	1.10
5/3/2012	138.22	85.70	52.52	no	<0.500	<0.500	<0.500	<0.500	<1.00				<0.500	<0.500
11/16/2012	138.22	88.18	50.04	no	<0.500	<0.500	<0.500	<0.500	<1.00	<50.0	768 J	778 J	<0.500	0.240 J
5/1/2013	138.22	90.59	47.63	no	<0.500	<0.500	<0.500	<0.500	<0.500	<50.0	773	746	<0.500	0.240 J
10/10/2013	138.22	94.04	44.18	no	<0.500	<0.500	<0.500	<1.50	<0.500	<50.0	93.7 J	<490	<0.500	0.330 J
Field Point MW8A Well Screen Interval (feet): 85-115														
4/19/2011	137.66	94.53	43.13	no	0.33 J	0.42 J	48	1.1	<1.0				<1.0	<0.50
11/16/2011	137.66	89.61	48.05	no	3.1	1.2	16	3.7	<1.0				<1.0	2.2
3/8/2012	137.66	87.81	49.85	no	GAUGE ONLY									

TABLE 4
CUMULATIVE HYDROCARBON GROUNDWATER MONITORING RESULTS
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

Date	Well Elev (feet-MSL)	GW Depth (feet-TOC)	GW Elev (feet-MSL)	NAPL (feet)	Benzene (ug/l)	Toluene (ug/l)	Ethyl-benzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TPHg (ug/l)	TPHd (ug/l)	TPHo (ug/l)	EDB (ug/l)	EDC (ug/l)
5/3/2012	137.66	87.60	50.06	no	1.60	<0.500	99.3	<0.500	0.280 J				<0.500	<0.500
11/16/2012	137.66			no										
5/2/2013	137.66	90.91	46.75	no	1.61	<0.500	7.31	0.900	0.299 J	1270	396 J	151 J	<0.500	2.28
10/10/2013	137.66	94.14	43.52	no	0.633	<0.500	0.522	<1.50	<0.500	510	376 J	145 J	<0.500	<0.500
Field Point MW8B		Well Screen Interval (feet): 130-140												
4/19/2011	137.70	94.38	43.32	no	0.66	0.90	6.5	1.7	<1.0				<1.0	0.57
11/16/2011	137.70	88.51	49.19	no	4.4	25	17	3.5	<1.0				<1.0	1.4
3/8/2012	137.70	86.84	50.86	no										
5/3/2012	137.70	86.80	50.90	no	0.540	<0.500	0.370 J	<0.500	<1.00				<0.500	<0.500
11/16/2012	137.70			no										
5/2/2013	137.70	90.19	47.51	no	0.341 J	<0.500	0.620	0.224 J	<0.500	547	667	421 J	<0.500	1.41
10/10/2013	137.70	93.61	44.09	no	<0.500	<0.500	13.6	<1.50	<0.500	2400	644	249 J	<0.500	<0.500
Field Point MW8C		Well Screen Interval (feet): 150-160												
4/19/2011	137.73	94.36	43.37	no	0.33 J	1.4	3.9	1.3	<1.0				<1.0	<0.50 J
11/16/2011	137.73	88.54	49.19	no	4.8	25	11	4.1	<1.0				<1.0	1.3
3/8/2012	137.73	86.87	50.86	no										
5/3/2012	137.73	86.50	51.23	no	1.24	1.10	0.780	<0.500	<1.00				<0.500	<0.500
11/16/2012	137.73			no										
5/2/2013	137.73	90.21	47.52	no	0.660	0.246 J	0.550	0.220 J	<0.500	382	660	381 J	<0.500	1.42
10/10/2013	137.73	93.59	44.14	no	<0.500	<0.500	0.500	<1.50	<0.500	350	731	264 J	<0.500	<0.500
Field Point MW9A		Well Screen Interval (feet): 80-110.5												
11/17/2012	135.14	88.19	46.95	no	<0.500	<0.500	<0.500	<0.500	0.693 J	193	59.8 J	97.2 J	<0.500	3.43

TABLE 4
CUMULATIVE HYDROCARBON GROUNDWATER MONITORING RESULTS
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

Date	Well Elev (feet-MSL)	GW Depth (feet-TOC)	GW Elev (feet-MSL)	NAPL (feet)	Benzene (ug/l)	Toluene (ug/l)	Ethyl-benzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TPHg (ug/l)	TPHd (ug/l)	TPHo (ug/l)	EDB (ug/l)	EDC (ug/l)
5/2/2013	135.14	90.53	44.61	no	<0.500	<0.500	<0.500	<0.500	1.12	211	121 J	136 J	<0.500	5.43
10/10/2013	135.14	94.22	40.92	no	<0.500	<0.500	<0.500	<1.50	1.24	173	189 J	82.7 J	<0.500	3.44
Field Point MW9B Well Screen Interval (feet): 140-150														
11/17/2012	135.18	86.19	48.99	no	<0.500	<0.500	<0.500	<0.500	<1.00	208	232 J	305 J	<0.500	4.79
5/2/2013	135.18	88.56	46.62	no	<0.500	<0.500	<0.500	<0.500	0.185 J	189	166 J	180 J	<0.500	6.39
10/10/2013	135.18	92.21	42.97	no	<0.500	<0.500	<0.500	<1.50	0.199 J	163	182 J	59.0 J	<0.500	5.23
Field Point MW9C Well Screen Interval (feet): 175-185														
11/17/2012	135.38	87.35	48.03	no	<0.500	<0.500	<0.500	<0.500	<1.00	72.5	125 J	179 J	<0.500	1.19
5/2/2013	135.38	90.06	45.32	no	<0.500	<0.500	<0.500	<0.500	<0.500	54.0	131 J	130 J	<0.500	1.38
10/10/2013	135.38	93.81	41.57	no	<0.500	<0.500	<0.500	<1.50	<0.500	51.2	637	557	<0.500	1.94
Field Point MW10A Well Screen Interval (feet): 80-110														
11/16/2012	137.43	88.99	48.44	no	<0.500	<0.500	<0.500	<0.500	0.301 J	279	<909	59.5 J	<0.500	3.51
5/1/2013	137.43	91.26	46.17	no	<0.500	<0.500	<0.500	0.227 J	0.410 J	201	81.7 J	57.2 J	<0.500	4.16
10/10/2013	137.43	94.71	42.72	no	<0.500	<0.500	<0.500	<1.50	0.229 J	185	310 J	93.7 J	<0.500	2.55
Field Point MW10B Well Screen Interval (feet): 140-150														
11/16/2012	137.46	88.01	49.45	no	<0.500	<0.500	<0.500	<0.500	<1.00	210	313 J	369 J	<0.500	3.33
5/1/2013	137.46	90.28	47.18	no	<0.500	<0.500	<0.500	<0.500	0.217 J	185	233 J	248 J	<0.500	4.98
10/10/2013	137.46	93.79	43.67	no	<0.500	<0.500	<0.500	<1.50	<0.500	214	348 J	221 J	<0.500	3.46
Field Point MW10C Well Screen Interval (feet): 165-175														
11/16/2012	137.44	87.99	49.45	no	<0.500	<0.500	<0.500	<0.500	<1.00	168	210 J	241 J	<0.500	2.22
5/1/2013	137.44	90.29	47.15	no	0.272 J	<0.500	<0.500	<0.500	<0.500	132	153 J	135 J	<0.500	1.90
10/10/2013	137.44	93.71	43.73	no	0.279 J	<0.500	<0.500	<1.50	<0.500	104	227 J	83.0 J	<0.500	1.28
Field Point TRIP BLANK Well Screen Interval (feet):														

TABLE 4
CUMULATIVE HYDROCARBON GROUNDWATER MONITORING RESULTS
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

Date	Well Elev (feet-MSL)	GW Depth (feet-TOC)	GW Elev (feet-MSL)	NAPL (feet)	Benzene (ug/l)	Toluene (ug/l)	Ethyl- benzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)	TPHg (ug/l)	TPHd (ug/l)	TPHo (ug/l)	EDB (ug/l)	EDC (ug/l)
10/14/2010				no	<0.50	<0.50	<0.50	<0.50	<1.0				<1.0	<0.50
4/19/2011				no	<0.50	<0.50	<0.50	<0.50	<1.0				<1.0	<1.0
11/16/2011				no	<0.50	<0.50	<0.50	<0.50	<1.0				<1.0	<0.50
3/8/2012				no	<0.500	<0.500	<0.500	<0.500					<0.500	<0.500
5/3/2012				no	<0.500	<0.500	<0.500	<0.500	<1.00				<0.500	<0.500
11/16/2012				no	<0.500	<0.500	<0.500	<0.500	<0.500				<0.500	<0.500
11/17/2012				no	<0.500	<0.500	<0.500	<0.500	<1.00	<50.0			<0.500	<0.500
5/1/2013				no	<0.500	<0.500	<0.500	<0.500	<0.500				<0.500	<0.500
5/2/2013				no	<0.500	<0.500	<0.500	<0.500	<0.500				<0.500	<0.500
10/9/2013				no	<0.500	<0.500	<0.500	<0.500	<1.50	<0.500			<0.500	<0.500
10/10/2013				no	<0.500	<0.500	<0.500	<0.500	<1.50	<0.500			<0.500	<0.500

TABLE 4
CUMULATIVE HYDROCARBON GROUNDWATER MONITORING RESULTS
FORMER EXXONMOBIL JALK FEE PROPERTY
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

Explanation:

BTEX = Benzene, toluene, ethylbenzene, and total xylenes

DUP = duplicate sample

ELEV = elevation

EPA = Environmental Protection Agency

GW = groundwater

feet-MSL = feet above mean sea level

feet-TOC = feet below top of casing

DIPE = di-isopropyl ether

EDB = 1,2-dibromoethane

EDC = 1,2-dichloroethane

ETBE = ethyl tertiary butyl ether

J = estimated value between method detection limit and practical quantitation limit

TAME = tertiary amyl methyl ether

TBA = tertiary butyl alcohol

TPHg = total petroleum hydrocarbons as gasoline [called Gasoline Range Organics (C4-C12) in laboratory reports]

TPHd = total petroleum hydrocarbons as diesel [called Petroleum Hydrocarbons C10-C28 in laboratory reports]

TPHo = total petroleum hydrocarbons as oil [called Petroleum Hydrocarbons C24-C40 in laboratory reports]

MTBE = methyl tertiary butyl ether

MTBE analyzed by EPA Method 8260B.

NAPL = non-aqueous phase liquid (thickness measured in feet)

ND = not detected at or above stated laboratory reporting limit

< = not detected at or above stated laboratory reporting limit

ug/l = micrograms per liter

(a) = values supplied by previous consultant

(b) = date of well abandonment not known

Environmental Resolutions, Inc. (ERI) became known as Cardno ERI on October 18, 2010

(c) = discrete sample taken at bottom of water column before well was purged

(d) = pre-purge sample taken at top of water column before well was purged

TABLE 5
FREON GROUNDWATER ANALYTICAL RESULTS
FORMER EXXONMOBIL STATION JALK FEE
10607 NORWALK BOULEVARD
SANTA FE SPRINGS, CALIFORNIA
CARDNO ERI 1155

Sample Point	Date Sampled	Freon 11	Freon 113
		Trichlorofluoromethane µg/L	1,1,2- trichloro- 1,2,2- trifluoroethane µg/L
W-89-MMW04	5/2/2013	4.65	8.24
W-89-MMW05	5/2/2013	23.2	49.2
W-91-MW6A	5/1/2013	19.3	37.3
W-91-MW6B	5/1/2013	<0.500	1.55
W-90-MW6C	5/1/2013	<0.500	0.848 J
W-90-MW6C Dup	5/1/2013	<0.500	0.969 J
W-92-MW7A	5/1/2013	15.4	30.6
W-92-MW7B	5/1/2013	1.62	5.61
W-91-MW7C	5/1/2013	<0.500	<1.00
W-91-MW8A	5/2/2013	<0.500	1.12
W-91-MW8B	5/2/2013	<0.500	<1.00
W-91-MW8C	5/2/2013	<0.500	<1.00
W-91-MW9A	5/2/2013	20.1	32.3
W-89-MW9B	5/2/2013	0.335 J	3.38
W-109-MW9C	5/2/2013	<0.500	<1.00
W-92-MW10A	5/1/2013	20.8	47.8
W-92-MW10B	5/1/2013	3.02	17.0
W-92-MW10C	5/1/2013	<0.500	<1.00
QCTB	5/1/2013	<0.500	<1.00
QCTB	5/2/2013	<0.500	<1.00

Explanation:

µg/L = micrograms per liter

J = estimated value between method detection limit and practical quantitation limit (reporting limit)

NA = not analyzed

< = not detected at or above the stated laboratory reporting limit

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville

2960 Foster Creighton Drive

Nashville, TN 37204

Tel: (615)726-0177

TestAmerica Job ID: 490-37786-1

TestAmerica Sample Delivery Group: 08115513

Client Project/Site: Cardno - Jalk Fee

For:

Cardno ERI

4572 Telephone Road #916

Ventura, California 93003

Attn: Mr. Alex Fuentes



Authorized for release by:

10/23/2013 3:49:27 PM

Leah Klingensmith, Senior Project Manager

(615)726-0177

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The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Cardno ERI

Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1

SDG: 08115513

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-37786-1	W-94-MW8C	Ground Water	10/10/13 12:45	10/15/13 08:15
490-37786-2	W-95-MW10A	Ground Water	10/10/13 14:56	10/15/13 08:15
490-37786-3	W-94-MW10B	Ground Water	10/10/13 15:42	10/15/13 08:15
490-37786-4	W-94-MW10C	Ground Water	10/10/13 16:42	10/15/13 08:15
490-37786-5	QCTB	Water	10/10/13 06:00	10/15/13 08:15
490-37786-6	W-95-MW7A	Ground Water	10/10/13 13:18	10/15/13 08:15
490-37786-7	W-95-MW7B	Ground Water	10/10/13 13:43	10/15/13 08:15
490-37786-8	W-95-MW7C	Ground Water	10/10/13 14:11	10/15/13 08:15
490-37786-9	W-96-MW8A	Ground Water	10/10/13 11:51	10/15/13 08:15
490-37786-10	W-95-MW8B	Ground Water	10/10/13 12:17	10/15/13 08:15

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TestAmerica Nashville

Case Narrative

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
SDG: 08115513

Job ID: 490-37786-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-37786-1

Comments

No additional comments.

Receipt

The samples were received on 10/15/2013 8:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5° C.

GC/MS VOA

Method(s) 8260B: The laboratory control sample (LCS) and / or laboratory control sample duplicate (LCSD) for batch 116146 exceeded control limits for the following analyte: Dichlorodifluoromethane. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

No other analytical or quality issues were noted.

GC VOA

Method(s) 8015B GRO LL: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 114647. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No other analytical or quality issues were noted.

GC Semi VOA

Method(s) 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 114790.

Method(s) 8015B: The method blank for batch 114790 contained C10-C28 above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

VOA Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
SDG: 08115513

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
*	LCS or LCSD exceeds the control limits
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation

These commonly used abbreviations may or may not be present in this report.

✓	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Client Sample ID: W-94-MW8C

Date Collected: 10/10/13 12:45

Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-1

Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.200	ug/L			10/22/13 15:46	1
Toluene	<0.500		0.500	0.170	ug/L			10/22/13 15:46	1
Ethylbenzene	0.500		0.500	0.190	ug/L			10/22/13 15:46	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/22/13 15:46	1
Methyl tert-butyl ether	<0.500		0.500	0.170	ug/L			10/22/13 15:46	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/22/13 15:46	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/22/13 15:46	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/22/13 15:46	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/22/13 15:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.00		1.00	0.330	ug/L			10/22/13 15:46	1
1,1-Dichloroethane	2.42		0.500	0.240	ug/L			10/22/13 15:46	1
1,1-Dichloroethene	42.9		0.500	0.250	ug/L			10/22/13 15:46	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/22/13 15:46	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/22/13 15:46	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/22/13 15:46	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/22/13 15:46	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 15:46	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 15:46	1
cis-1,2-Dichloroethene	37.1		0.500	0.210	ug/L			10/22/13 15:46	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/22/13 15:46	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/22/13 15:46	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/22/13 15:46	1
1,2-Dichloroethane	<0.500		0.500	0.200	ug/L			10/22/13 15:46	1
1,2-Dichloropropane	<0.500		0.500	0.250	ug/L			10/22/13 15:46	1
trans-1,2-Dichloroethene	1.09		0.500	0.230	ug/L			10/22/13 15:46	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/22/13 15:46	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/22/13 15:46	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/22/13 15:46	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/22/13 15:46	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/22/13 15:46	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/22/13 15:46	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/22/13 15:46	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/22/13 15:46	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/22/13 15:46	1
Acetone	<5.00		5.00	2.66	ug/L			10/22/13 15:46	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/22/13 15:46	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/22/13 15:46	1
Bromoform	<0.500		0.500	0.290	ug/L			10/22/13 15:46	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/22/13 15:46	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/22/13 15:46	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/22/13 15:46	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/22/13 15:46	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/22/13 15:46	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/22/13 15:46	1
Chloroform	<0.500		0.500	0.230	ug/L			10/22/13 15:46	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/22/13 15:46	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/22/13 15:46	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/22/13 15:46	1
Dichlorodifluoromethane	<0.500	*	0.500	0.170	ug/L			10/22/13 15:46	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Client Sample ID: W-94-MW8C

Lab Sample ID: 490-37786-1

Date Collected: 10/10/13 12:45
 Date Received: 10/15/13 08:15

Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/22/13 15:46	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/22/13 15:46	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/22/13 15:46	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/22/13 15:46	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/22/13 15:46	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/22/13 15:46	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/22/13 15:46	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 15:46	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/22/13 15:46	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 15:46	1
Styrene	<0.500		0.500	0.280	ug/L			10/22/13 15:46	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 15:46	1
Tetrachloroethene	8.63		0.500	0.140	ug/L			10/22/13 15:46	1
Trichloroethene	77.6		0.500	0.200	ug/L			10/22/13 15:46	1
Trichlorofluoromethane	<0.500		0.500	0.210	ug/L			10/22/13 15:46	1
Vinyl chloride	13.2		0.500	0.180	ug/L			10/22/13 15:46	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		10/22/13 15:46	1
4-Bromofluorobenzene (Surr)	99		70 - 130		10/22/13 15:46	1
Dibromofluoromethane (Surr)	102		70 - 130		10/22/13 15:46	1
Toluene-d8 (Surr)	99		70 - 130		10/22/13 15:46	1

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-C12	350		50.0	38.0	ug/L			10/16/13 12:12	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	95		50 - 150					10/16/13 12:12	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	731	B	490	39.2	ug/L		10/16/13 12:18	10/17/13 15:15	1
ORO C24-C40	264	J	490	39.2	ug/L		10/16/13 12:18	10/17/13 15:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	85		50 - 150				10/16/13 12:18	10/17/13 15:15	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
SDG: 08115513

Client Sample ID: W-95-MW10A

Date Collected: 10/10/13 14:56
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-2
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.200	ug/L			10/23/13 10:33	1
Toluene	<0.500		0.500	0.170	ug/L			10/23/13 10:33	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/23/13 10:33	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/23/13 10:33	1
Methyl tert-butyl ether	0.229	J	0.500	0.170	ug/L			10/23/13 10:33	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/23/13 10:33	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/23/13 10:33	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/23/13 10:33	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/23/13 10:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	31.3		1.00	0.330	ug/L			10/23/13 10:33	1
1,1-Dichloroethane	13.5		0.500	0.240	ug/L			10/23/13 10:33	1
1,1-Dichloroethene	89.2		0.500	0.250	ug/L			10/23/13 10:33	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/23/13 10:33	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/23/13 10:33	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/23/13 10:33	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/23/13 10:33	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/23/13 10:33	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/23/13 10:33	1
cis-1,2-Dichloroethene	39.8		0.500	0.210	ug/L			10/23/13 10:33	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/23/13 10:33	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/23/13 10:33	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/23/13 10:33	1
1,2-Dichloroethane	2.55		0.500	0.200	ug/L			10/23/13 10:33	1
1,2-Dichloropropane	0.286	J	0.500	0.250	ug/L			10/23/13 10:33	1
trans-1,2-Dichloroethene	1.54		0.500	0.230	ug/L			10/23/13 10:33	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/23/13 10:33	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/23/13 10:33	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/23/13 10:33	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/23/13 10:33	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/23/13 10:33	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/23/13 10:33	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/23/13 10:33	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/23/13 10:33	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/23/13 10:33	1
Acetone	<5.00		5.00	2.66	ug/L			10/23/13 10:33	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/23/13 10:33	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/23/13 10:33	1
Bromoform	<0.500		0.500	0.290	ug/L			10/23/13 10:33	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/23/13 10:33	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/23/13 10:33	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/23/13 10:33	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/23/13 10:33	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/23/13 10:33	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/23/13 10:33	1
Chloroform	6.33		0.500	0.230	ug/L			10/23/13 10:33	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/23/13 10:33	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/23/13 10:33	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/23/13 10:33	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
SDG: 08115513

Client Sample ID: W-95-MW10A

Lab Sample ID: 490-37786-2

Date Collected: 10/10/13 14:56
Date Received: 10/15/13 08:15

Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.500		0.500	0.170	ug/L			10/23/13 10:33	1
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/23/13 10:33	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/23/13 10:33	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/23/13 10:33	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/23/13 10:33	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/23/13 10:33	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/23/13 10:33	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/23/13 10:33	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/23/13 10:33	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/23/13 10:33	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/23/13 10:33	1
Styrene	<0.500		0.500	0.280	ug/L			10/23/13 10:33	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/23/13 10:33	1
Tetrachloroethene	141		0.500	0.140	ug/L			10/23/13 10:33	1
Trichloroethene	103		0.500	0.200	ug/L			10/23/13 10:33	1
Trichlorofluoromethane	12.1		0.500	0.210	ug/L			10/23/13 10:33	1
Vinyl chloride	0.441 J		0.500	0.180	ug/L			10/23/13 10:33	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 130		10/23/13 10:33	1
4-Bromofluorobenzene (Surr)	93		70 - 130		10/23/13 10:33	1
Dibromofluoromethane (Surr)	104		70 - 130		10/23/13 10:33	1
Toluene-d8 (Surr)	97		70 - 130		10/23/13 10:33	1

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-C12	185		50.0	38.0	ug/L			10/16/13 12:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		50 - 150					10/16/13 12:43	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	310 J B		490	39.2	ug/L		10/16/13 12:18	10/17/13 15:30	1
ORO C24-C40	93.7 J		490	39.2	ug/L		10/16/13 12:18	10/17/13 15:30	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	85		50 - 150				10/16/13 12:18	10/17/13 15:30	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Client Sample ID: W-94-MW10B

Date Collected: 10/10/13 15:42
 Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-3
 Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.200	ug/L			10/23/13 11:01	1
Toluene	<0.500		0.500	0.170	ug/L			10/23/13 11:01	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/23/13 11:01	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/23/13 11:01	1
Methyl tert-butyl ether	<0.500		0.500	0.170	ug/L			10/23/13 11:01	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/23/13 11:01	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/23/13 11:01	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/23/13 11:01	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/23/13 11:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	12.9		1.00	0.330	ug/L			10/23/13 11:01	1
1,1-Dichloroethane	17.4		0.500	0.240	ug/L			10/23/13 11:01	1
1,1-Dichloroethene	117		0.500	0.250	ug/L			10/23/13 11:01	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/23/13 11:01	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/23/13 11:01	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/23/13 11:01	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/23/13 11:01	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/23/13 11:01	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/23/13 11:01	1
cis-1,2-Dichloroethene	79.5		0.500	0.210	ug/L			10/23/13 11:01	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/23/13 11:01	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/23/13 11:01	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/23/13 11:01	1
1,2-Dichloroethane	3.46		0.500	0.200	ug/L			10/23/13 11:01	1
1,2-Dichloropropene	<0.500		0.500	0.250	ug/L			10/23/13 11:01	1
trans-1,2-Dichloroethene	1.56		0.500	0.230	ug/L			10/23/13 11:01	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/23/13 11:01	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/23/13 11:01	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/23/13 11:01	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/23/13 11:01	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/23/13 11:01	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/23/13 11:01	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/23/13 11:01	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/23/13 11:01	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/23/13 11:01	1
Acetone	<5.00		5.00	2.66	ug/L			10/23/13 11:01	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/23/13 11:01	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/23/13 11:01	1
Bromoform	<0.500		0.500	0.290	ug/L			10/23/13 11:01	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/23/13 11:01	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/23/13 11:01	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/23/13 11:01	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/23/13 11:01	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/23/13 11:01	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/23/13 11:01	1
Chloroform	2.97		0.500	0.230	ug/L			10/23/13 11:01	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/23/13 11:01	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/23/13 11:01	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/23/13 11:01	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Client Sample ID: W-94-MW10B

Lab Sample ID: 490-37786-3

Date Collected: 10/10/13 15:42
 Date Received: 10/15/13 08:15

Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.500		0.500	0.170	ug/L			10/23/13 11:01	1
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/23/13 11:01	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/23/13 11:01	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/23/13 11:01	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/23/13 11:01	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/23/13 11:01	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/23/13 11:01	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/23/13 11:01	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/23/13 11:01	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/23/13 11:01	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/23/13 11:01	1
Styrene	<0.500		0.500	0.280	ug/L			10/23/13 11:01	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/23/13 11:01	1
Tetrachloroethene	98.3		0.500	0.140	ug/L			10/23/13 11:01	1
Trichloroethene	91.9		0.500	0.200	ug/L			10/23/13 11:01	1
Trichlorofluoromethane	1.79		0.500	0.210	ug/L			10/23/13 11:01	1
Vinyl chloride	<0.500		0.500	0.180	ug/L			10/23/13 11:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	100		70 - 130		10/23/13 11:01	1
4-Bromofluorobenzene (Surr)	93		70 - 130		10/23/13 11:01	1
Dibromofluoromethane (Surr)	101		70 - 130		10/23/13 11:01	1
Toluene-d8 (Surr)	97		70 - 130		10/23/13 11:01	1

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-C12	214		50.0	38.0	ug/L			10/16/13 13:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	96		50 - 150					10/16/13 13:13	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	348	J B	490	39.2	ug/L		10/16/13 12:18	10/17/13 15:46	1
ORO C24-C40	221	J	490	39.2	ug/L		10/16/13 12:18	10/17/13 15:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	90		50 - 150				10/16/13 12:18	10/17/13 15:46	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Client Sample ID: W-94-MW10C

Date Collected: 10/10/13 16:42
 Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-4
 Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.279	J	0.500	0.200	ug/L			10/22/13 20:38	1
Toluene	<0.500		0.500	0.170	ug/L			10/22/13 20:38	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/22/13 20:38	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/22/13 20:38	1
Methyl tert-butyl ether	<0.500		0.500	0.170	ug/L			10/22/13 20:38	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/22/13 20:38	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/22/13 20:38	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/22/13 20:38	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/22/13 20:38	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.00		1.00	0.330	ug/L			10/22/13 20:38	1
1,1-Dichloroethane	5.76		0.500	0.240	ug/L			10/22/13 20:38	1
1,1-Dichloroethene	49.6		0.500	0.250	ug/L			10/22/13 20:38	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/22/13 20:38	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/22/13 20:38	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/22/13 20:38	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/22/13 20:38	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 20:38	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 20:38	1
cis-1,2-Dichloroethene	105		0.500	0.210	ug/L			10/22/13 20:38	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/22/13 20:38	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/22/13 20:38	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/22/13 20:38	1
1,2-Dichloroethane	1.28		0.500	0.200	ug/L			10/22/13 20:38	1
1,2-Dichloropropane	<0.500		0.500	0.250	ug/L			10/22/13 20:38	1
trans-1,2-Dichloroethene	2.33		0.500	0.230	ug/L			10/22/13 20:38	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/22/13 20:38	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/22/13 20:38	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/22/13 20:38	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/22/13 20:38	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/22/13 20:38	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/22/13 20:38	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/22/13 20:38	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/22/13 20:38	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/22/13 20:38	1
Acetone	<5.00		5.00	2.66	ug/L			10/22/13 20:38	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/22/13 20:38	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/22/13 20:38	1
Bromoform	<0.500		0.500	0.290	ug/L			10/22/13 20:38	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/22/13 20:38	1
Carbon disulfide	0.347	J	0.500	0.220	ug/L			10/22/13 20:38	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/22/13 20:38	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/22/13 20:38	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/22/13 20:38	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/22/13 20:38	1
Chloroform	<0.500		0.500	0.230	ug/L			10/22/13 20:38	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/22/13 20:38	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/22/13 20:38	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/22/13 20:38	1
Dichlorodifluoromethane	<0.500	*	0.500	0.170	ug/L			10/22/13 20:38	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Client Sample ID: W-94-MW10C

Lab Sample ID: 490-37786-4
Matrix: Ground Water

Date Collected: 10/10/13 16:42
 Date Received: 10/15/13 08:15

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/22/13 20:38	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/22/13 20:38	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/22/13 20:38	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/22/13 20:38	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/22/13 20:38	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/22/13 20:38	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/22/13 20:38	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 20:38	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/22/13 20:38	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 20:38	1
Styrene	<0.500		0.500	0.280	ug/L			10/22/13 20:38	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 20:38	1
Tetrachloroethene	29.0		0.500	0.140	ug/L			10/22/13 20:38	1
Trichloroethene	4.99		0.500	0.200	ug/L			10/22/13 20:38	1
Trichlorofluoromethane	<0.500		0.500	0.210	ug/L			10/22/13 20:38	1
Vinyl chloride	16.4		0.500	0.180	ug/L			10/22/13 20:38	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 130		10/22/13 20:38	1
4-Bromofluorobenzene (Surr)	96		70 - 130		10/22/13 20:38	1
Dibromofluoromethane (Surr)	101		70 - 130		10/22/13 20:38	1
Toluene-d8 (Surr)	98		70 - 130		10/22/13 20:38	1

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-C12	104		50.0	38.0	ug/L			10/16/13 13:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		50 - 150					10/16/13 13:43	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	227	J B	490	39.2	ug/L		10/16/13 12:18	10/17/13 16:01	1
ORO C24-C40	83.0	J	490	39.2	ug/L		10/16/13 12:18	10/17/13 16:01	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	75		50 - 150				10/16/13 12:18	10/17/13 16:01	1

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Client Sample ID: QCTB
Date Collected: 10/10/13 06:00
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.200	ug/L			10/22/13 15:18	1
Toluene	<0.500		0.500	0.170	ug/L			10/22/13 15:18	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/22/13 15:18	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/22/13 15:18	1
Methyl tert-butyl ether	<0.500		0.500	0.170	ug/L			10/22/13 15:18	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/22/13 15:18	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/22/13 15:18	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/22/13 15:18	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/22/13 15:18	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.00		1.00	0.330	ug/L			10/22/13 15:18	1
1,1-Dichloroethane	<0.500		0.500	0.240	ug/L			10/22/13 15:18	1
1,1-Dichloroethene	<0.500		0.500	0.250	ug/L			10/22/13 15:18	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/22/13 15:18	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/22/13 15:18	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/22/13 15:18	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/22/13 15:18	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 15:18	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 15:18	1
cis-1,2-Dichloroethene	<0.500		0.500	0.210	ug/L			10/22/13 15:18	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/22/13 15:18	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/22/13 15:18	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/22/13 15:18	1
1,2-Dichloroethane	<0.500		0.500	0.200	ug/L			10/22/13 15:18	1
1,2-Dichloropropane	<0.500		0.500	0.250	ug/L			10/22/13 15:18	1
trans-1,2-Dichloroethene	<0.500		0.500	0.230	ug/L			10/22/13 15:18	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/22/13 15:18	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/22/13 15:18	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/22/13 15:18	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/22/13 15:18	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/22/13 15:18	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/22/13 15:18	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/22/13 15:18	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/22/13 15:18	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/22/13 15:18	1
Acetone	<5.00		5.00	2.66	ug/L			10/22/13 15:18	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/22/13 15:18	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/22/13 15:18	1
Bromoform	<0.500		0.500	0.290	ug/L			10/22/13 15:18	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/22/13 15:18	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/22/13 15:18	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/22/13 15:18	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/22/13 15:18	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/22/13 15:18	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/22/13 15:18	1
Chloroform	<0.500		0.500	0.230	ug/L			10/22/13 15:18	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/22/13 15:18	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/22/13 15:18	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/22/13 15:18	1
Dichlorodifluoromethane	<0.500	*	0.500	0.170	ug/L			10/22/13 15:18	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Client Sample ID: QCTB
Date Collected: 10/10/13 06:00
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-5
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/22/13 15:18	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/22/13 15:18	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/22/13 15:18	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/22/13 15:18	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/22/13 15:18	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/22/13 15:18	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/22/13 15:18	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 15:18	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/22/13 15:18	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 15:18	1
Styrene	<0.500		0.500	0.280	ug/L			10/22/13 15:18	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 15:18	1
Tetrachloroethene	<0.500		0.500	0.140	ug/L			10/22/13 15:18	1
Trichloroethene	<0.500		0.500	0.200	ug/L			10/22/13 15:18	1
Trichlorofluoromethane	<0.500		0.500	0.210	ug/L			10/22/13 15:18	1
Vinyl chloride	<0.500		0.500	0.180	ug/L			10/22/13 15:18	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 130					10/22/13 15:18	1
4-Bromofluorobenzene (Surr)	95		70 - 130					10/22/13 15:18	1
Dibromofluoromethane (Surr)	99		70 - 130					10/22/13 15:18	1
Toluene-d8 (Surr)	99		70 - 130					10/22/13 15:18	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Client Sample ID: W-95-MW7A

Date Collected: 10/10/13 13:18
 Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-6
 Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.200	ug/L			10/22/13 21:06	1
Toluene	<0.500		0.500	0.170	ug/L			10/22/13 21:06	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/22/13 21:06	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/22/13 21:06	1
Methyl tert-butyl ether	0.293	J	0.500	0.170	ug/L			10/22/13 21:06	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/22/13 21:06	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/22/13 21:06	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/22/13 21:06	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/22/13 21:06	1
1,1,2-Trichloro-1,2,2-trifluoroethane	17.1		1.00	0.330	ug/L			10/22/13 21:06	1
1,1-Dichloroethane	12.8		0.500	0.240	ug/L			10/22/13 21:06	1
1,1-Dichloroethene	70.8		0.500	0.250	ug/L			10/22/13 21:06	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/22/13 21:06	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/22/13 21:06	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/22/13 21:06	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/22/13 21:06	1
1,2,4-Trimethylbenzene	0.299	J	0.500	0.170	ug/L			10/22/13 21:06	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 21:06	1
cis-1,2-Dichloroethene	32.8		0.500	0.210	ug/L			10/22/13 21:06	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/22/13 21:06	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/22/13 21:06	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/22/13 21:06	1
1,2-Dichloroethane	2.21		0.500	0.200	ug/L			10/22/13 21:06	1
1,2-Dichloropropene	<0.500		0.500	0.250	ug/L			10/22/13 21:06	1
trans-1,2-Dichloroethene	1.27		0.500	0.230	ug/L			10/22/13 21:06	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/22/13 21:06	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/22/13 21:06	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/22/13 21:06	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/22/13 21:06	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/22/13 21:06	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/22/13 21:06	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/22/13 21:06	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/22/13 21:06	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/22/13 21:06	1
Acetone	<5.00		5.00	2.66	ug/L			10/22/13 21:06	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/22/13 21:06	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/22/13 21:06	1
Bromoform	<0.500		0.500	0.290	ug/L			10/22/13 21:06	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/22/13 21:06	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/22/13 21:06	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/22/13 21:06	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/22/13 21:06	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/22/13 21:06	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/22/13 21:06	1
Chloroform	5.20		0.500	0.230	ug/L			10/22/13 21:06	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/22/13 21:06	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/22/13 21:06	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/22/13 21:06	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Client Sample ID: W-95-MW7A
Date Collected: 10/10/13 13:18
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-6
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.500	*	0.500	0.170	ug/L			10/22/13 21:06	1
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/22/13 21:06	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/22/13 21:06	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/22/13 21:06	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/22/13 21:06	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/22/13 21:06	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/22/13 21:06	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/22/13 21:06	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 21:06	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/22/13 21:06	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 21:06	1
Styrene	<0.500		0.500	0.280	ug/L			10/22/13 21:06	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 21:06	1
Tetrachloroethene	89.9		0.500	0.140	ug/L			10/22/13 21:06	1
Trichloroethene	92.9		0.500	0.200	ug/L			10/22/13 21:06	1
Trichlorofluoromethane	7.99		0.500	0.210	ug/L			10/22/13 21:06	1
Vinyl chloride	0.738		0.500	0.180	ug/L			10/22/13 21:06	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	102		70 - 130		10/22/13 21:06	1
4-Bromofluorobenzene (Surr)	95		70 - 130		10/22/13 21:06	1
Dibromofluoromethane (Surr)	101		70 - 130		10/22/13 21:06	1
Toluene-d8 (Surr)	98		70 - 130		10/22/13 21:06	1

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-C12	145		50.0	38.0	ug/L			10/16/13 14:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	90		50 - 150					10/16/13 14:13	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	382	J B	490	39.2	ug/L		10/16/13 12:18	10/17/13 16:17	1	
ORO C24-C40	125	J	490	39.2	ug/L		10/16/13 12:18	10/17/13 16:17	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
o-Terphenyl (Surr)	92		50 - 150					10/16/13 12:18	10/17/13 16:17	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Client Sample ID: W-95-MW7B

Date Collected: 10/10/13 13:43

Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-7

Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.200	ug/L			10/22/13 21:34	1
Toluene	<0.500		0.500	0.170	ug/L			10/22/13 21:34	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/22/13 21:34	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/22/13 21:34	1
Methyl tert-butyl ether	0.270	J	0.500	0.170	ug/L			10/22/13 21:34	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/22/13 21:34	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/22/13 21:34	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/22/13 21:34	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/22/13 21:34	1
1,1,2-Trichloro-1,2,2-trifluoroethane	20.5		1.00	0.330	ug/L			10/22/13 21:34	1
1,1-Dichloroethane	14.0		0.500	0.240	ug/L			10/22/13 21:34	1
1,1-Dichloroethene	80.8		0.500	0.250	ug/L			10/22/13 21:34	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/22/13 21:34	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/22/13 21:34	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/22/13 21:34	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/22/13 21:34	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 21:34	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 21:34	1
cis-1,2-Dichloroethene	37.3		0.500	0.210	ug/L			10/22/13 21:34	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/22/13 21:34	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/22/13 21:34	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/22/13 21:34	1
1,2-Dichloroethane	2.35		0.500	0.200	ug/L			10/22/13 21:34	1
1,2-Dichloropropene	<0.500		0.500	0.250	ug/L			10/22/13 21:34	1
trans-1,2-Dichloroethene	0.904		0.500	0.230	ug/L			10/22/13 21:34	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/22/13 21:34	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/22/13 21:34	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/22/13 21:34	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/22/13 21:34	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/22/13 21:34	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/22/13 21:34	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/22/13 21:34	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/22/13 21:34	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/22/13 21:34	1
Acetone	<5.00		5.00	2.66	ug/L			10/22/13 21:34	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/22/13 21:34	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/22/13 21:34	1
Bromoform	<0.500		0.500	0.290	ug/L			10/22/13 21:34	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/22/13 21:34	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/22/13 21:34	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/22/13 21:34	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/22/13 21:34	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/22/13 21:34	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/22/13 21:34	1
Chloroform	3.33		0.500	0.230	ug/L			10/22/13 21:34	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/22/13 21:34	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/22/13 21:34	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/22/13 21:34	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
SDG: 08115513

Client Sample ID: W-95-MW7B
Date Collected: 10/10/13 13:43
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-7
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.500	*	0.500	0.170	ug/L			10/22/13 21:34	1
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/22/13 21:34	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/22/13 21:34	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/22/13 21:34	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/22/13 21:34	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/22/13 21:34	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/22/13 21:34	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/22/13 21:34	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 21:34	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/22/13 21:34	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 21:34	1
Styrene	<0.500		0.500	0.280	ug/L			10/22/13 21:34	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 21:34	1
Tetrachloroethene	100		0.500	0.140	ug/L			10/22/13 21:34	1
Trichloroethene	109		0.500	0.200	ug/L			10/22/13 21:34	1
Trichlorofluoromethane	5.19		0.500	0.210	ug/L			10/22/13 21:34	1
Vinyl chloride	0.314	J	0.500	0.180	ug/L			10/22/13 21:34	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	98		70 - 130		10/22/13 21:34	1
4-Bromofluorobenzene (Surr)	95		70 - 130		10/22/13 21:34	1
Dibromofluoromethane (Surr)	102		70 - 130		10/22/13 21:34	1
Toluene-d8 (Surr)	99		70 - 130		10/22/13 21:34	1

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-C12	170		50.0	38.0	ug/L			10/16/13 14:43	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	88		50 - 150					10/16/13 14:43	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	352	J B	490	39.2	ug/L		10/16/13 12:18	10/17/13 16:32	1
ORO C24-C40	140	J	490	39.2	ug/L		10/16/13 12:18	10/17/13 16:32	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	88		50 - 150				10/16/13 12:18	10/17/13 16:32	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Client Sample ID: W-95-MW7C

Date Collected: 10/10/13 14:11
 Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-8
 Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.200	ug/L			10/22/13 22:01	1
Toluene	<0.500		0.500	0.170	ug/L			10/22/13 22:01	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/22/13 22:01	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/22/13 22:01	1
Methyl tert-butyl ether	<0.500		0.500	0.170	ug/L			10/22/13 22:01	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/22/13 22:01	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/22/13 22:01	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/22/13 22:01	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/22/13 22:01	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.00		1.00	0.330	ug/L			10/22/13 22:01	1
1,1-Dichloroethane	1.42		0.500	0.240	ug/L			10/22/13 22:01	1
1,1-Dichloroethene	9.87		0.500	0.250	ug/L			10/22/13 22:01	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/22/13 22:01	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/22/13 22:01	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/22/13 22:01	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/22/13 22:01	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 22:01	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 22:01	1
cis-1,2-Dichloroethene	5.30		0.500	0.210	ug/L			10/22/13 22:01	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/22/13 22:01	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/22/13 22:01	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/22/13 22:01	1
1,2-Dichloroethane	0.330 J		0.500	0.200	ug/L			10/22/13 22:01	1
1,2-Dichloropropane	<0.500		0.500	0.250	ug/L			10/22/13 22:01	1
trans-1,2-Dichloroethene	<0.500		0.500	0.230	ug/L			10/22/13 22:01	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/22/13 22:01	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/22/13 22:01	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/22/13 22:01	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/22/13 22:01	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/22/13 22:01	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/22/13 22:01	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/22/13 22:01	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/22/13 22:01	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/22/13 22:01	1
Acetone	<5.00		5.00	2.66	ug/L			10/22/13 22:01	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/22/13 22:01	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/22/13 22:01	1
Bromoform	<0.500		0.500	0.290	ug/L			10/22/13 22:01	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/22/13 22:01	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/22/13 22:01	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/22/13 22:01	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/22/13 22:01	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/22/13 22:01	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/22/13 22:01	1
Chloroform	<0.500		0.500	0.230	ug/L			10/22/13 22:01	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/22/13 22:01	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/22/13 22:01	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/22/13 22:01	1
Dichlorodifluoromethane	<0.500 *		0.500	0.170	ug/L			10/22/13 22:01	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Client Sample ID: W-95-MW7C

Lab Sample ID: 490-37786-8

Date Collected: 10/10/13 14:11
 Date Received: 10/15/13 08:15

Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/22/13 22:01	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/22/13 22:01	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/22/13 22:01	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/22/13 22:01	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/22/13 22:01	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/22/13 22:01	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/22/13 22:01	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 22:01	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/22/13 22:01	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 22:01	1
Styrene	<0.500		0.500	0.280	ug/L			10/22/13 22:01	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 22:01	1
Tetrachloroethene	7.56		0.500	0.140	ug/L			10/22/13 22:01	1
Trichloroethene	7.85		0.500	0.200	ug/L			10/22/13 22:01	1
Trichlorofluoromethane	<0.500		0.500	0.210	ug/L			10/22/13 22:01	1
Vinyl chloride	<0.500		0.500	0.180	ug/L			10/22/13 22:01	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	99		70 - 130		10/22/13 22:01	1
4-Bromofluorobenzene (Surr)	94		70 - 130		10/22/13 22:01	1
Dibromofluoromethane (Surr)	101		70 - 130		10/22/13 22:01	1
Toluene-d8 (Surr)	99		70 - 130		10/22/13 22:01	1

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-C12	<50.0		50.0	38.0	ug/L			10/16/13 15:13	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	100		50 - 150					10/16/13 15:13	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	93.7	J B	490	39.2	ug/L		10/16/13 12:18	10/17/13 19:24	1
ORO C24-C40	<490		490	39.2	ug/L		10/16/13 12:18	10/17/13 19:24	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	77		50 - 150				10/16/13 12:18	10/17/13 19:24	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Client Sample ID: W-96-MW8A

Date Collected: 10/10/13 11:51
 Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-9
 Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.633		0.500	0.200	ug/L			10/22/13 22:29	1
Toluene	<0.500		0.500	0.170	ug/L			10/22/13 22:29	1
Ethylbenzene	0.522		0.500	0.190	ug/L			10/22/13 22:29	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/22/13 22:29	1
Methyl tert-butyl ether	<0.500		0.500	0.170	ug/L			10/22/13 22:29	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/22/13 22:29	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/22/13 22:29	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/22/13 22:29	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/22/13 22:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.18		1.00	0.330	ug/L			10/22/13 22:29	1
1,1-Dichloroethane	8.60		0.500	0.240	ug/L			10/22/13 22:29	1
1,1-Dichloroethene	19.2		0.500	0.250	ug/L			10/22/13 22:29	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/22/13 22:29	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/22/13 22:29	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/22/13 22:29	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/22/13 22:29	1
1,2,4-Trimethylbenzene	0.248 J		0.500	0.170	ug/L			10/22/13 22:29	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 22:29	1
cis-1,2-Dichloroethene	13.0		0.500	0.210	ug/L			10/22/13 22:29	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/22/13 22:29	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/22/13 22:29	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/22/13 22:29	1
1,2-Dichloroethane	<0.500		0.500	0.200	ug/L			10/22/13 22:29	1
1,2-Dichloropropene	<0.500		0.500	0.250	ug/L			10/22/13 22:29	1
trans-1,2-Dichloroethene	5.35		0.500	0.230	ug/L			10/22/13 22:29	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/22/13 22:29	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/22/13 22:29	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/22/13 22:29	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/22/13 22:29	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/22/13 22:29	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/22/13 22:29	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/22/13 22:29	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/22/13 22:29	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/22/13 22:29	1
Acetone	<5.00		5.00	2.66	ug/L			10/22/13 22:29	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/22/13 22:29	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/22/13 22:29	1
Bromoform	<0.500		0.500	0.290	ug/L			10/22/13 22:29	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/22/13 22:29	1
Carbon disulfide	0.530		0.500	0.220	ug/L			10/22/13 22:29	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/22/13 22:29	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/22/13 22:29	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/22/13 22:29	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/22/13 22:29	1
Chloroform	<0.500		0.500	0.230	ug/L			10/22/13 22:29	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/22/13 22:29	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/22/13 22:29	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/22/13 22:29	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
SDG: 08115513

Client Sample ID: W-96-MW8A

Date Collected: 10/10/13 11:51
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-9
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.500	*	0.500	0.170	ug/L			10/22/13 22:29	1
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/22/13 22:29	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/22/13 22:29	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/22/13 22:29	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/22/13 22:29	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/22/13 22:29	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/22/13 22:29	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/22/13 22:29	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 22:29	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/22/13 22:29	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 22:29	1
Styrene	<0.500		0.500	0.280	ug/L			10/22/13 22:29	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 22:29	1
Tetrachloroethene	9.10		0.500	0.140	ug/L			10/22/13 22:29	1
Trichloroethene	43.4		0.500	0.200	ug/L			10/22/13 22:29	1
Trichlorofluoromethane	<0.500		0.500	0.210	ug/L			10/22/13 22:29	1
Vinyl chloride	26.8		0.500	0.180	ug/L			10/22/13 22:29	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		70 - 130					10/22/13 22:29	1
4-Bromofluorobenzene (Surr)	96		70 - 130					10/22/13 22:29	1
Dibromofluoromethane (Surr)	102		70 - 130					10/22/13 22:29	1
Toluene-d8 (Surr)	99		70 - 130					10/22/13 22:29	1

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-C12	510		50.0	38.0	ug/L			10/16/13 15:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	94		50 - 150					10/16/13 15:44	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	376	J B	490	39.2	ug/L		10/16/13 12:18	10/17/13 17:04	1
ORO C24-C40	145	J	490	39.2	ug/L		10/16/13 12:18	10/17/13 17:04	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	69		50 - 150				10/16/13 12:18	10/17/13 17:04	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Client Sample ID: W-95-MW8B

Date Collected: 10/10/13 12:17
 Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-10

Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.200	ug/L			10/22/13 22:57	1
Toluene	<0.500		0.500	0.170	ug/L			10/22/13 22:57	1
Ethylbenzene	13.6		0.500	0.190	ug/L			10/22/13 22:57	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/22/13 22:57	1
Methyl tert-butyl ether	<0.500		0.500	0.170	ug/L			10/22/13 22:57	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/22/13 22:57	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/22/13 22:57	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/22/13 22:57	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/22/13 22:57	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.00		1.00	0.330	ug/L			10/22/13 22:57	1
1,1-Dichloroethane	3.79		0.500	0.240	ug/L			10/22/13 22:57	1
1,1-Dichloroethene	53.7		0.500	0.250	ug/L			10/22/13 22:57	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/22/13 22:57	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/22/13 22:57	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/22/13 22:57	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/22/13 22:57	1
1,2,4-Trimethylbenzene	0.430 J		0.500	0.170	ug/L			10/22/13 22:57	1
1,3,5-Trimethylbenzene	0.483 J		0.500	0.170	ug/L			10/22/13 22:57	1
cis-1,2-Dichloroethene	80.6		0.500	0.210	ug/L			10/22/13 22:57	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/22/13 22:57	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/22/13 22:57	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/22/13 22:57	1
1,2-Dichloroethane	<0.500		0.500	0.200	ug/L			10/22/13 22:57	1
1,2-Dichloropropane	<0.500		0.500	0.250	ug/L			10/22/13 22:57	1
trans-1,2-Dichloroethene	5.23		0.500	0.230	ug/L			10/22/13 22:57	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/22/13 22:57	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/22/13 22:57	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/22/13 22:57	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/22/13 22:57	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/22/13 22:57	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/22/13 22:57	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/22/13 22:57	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/22/13 22:57	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/22/13 22:57	1
Acetone	<5.00		5.00	2.66	ug/L			10/22/13 22:57	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/22/13 22:57	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/22/13 22:57	1
Bromoform	<0.500		0.500	0.290	ug/L			10/22/13 22:57	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/22/13 22:57	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/22/13 22:57	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/22/13 22:57	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/22/13 22:57	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/22/13 22:57	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/22/13 22:57	1
Chloroform	<0.500		0.500	0.230	ug/L			10/22/13 22:57	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/22/13 22:57	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/22/13 22:57	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/22/13 22:57	1
Dichlorodifluoromethane	<0.500 *		0.500	0.170	ug/L			10/22/13 22:57	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Client Sample ID: W-95-MW8B

Date Collected: 10/10/13 12:17
 Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-10

Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/22/13 22:57	1
Isopropylbenzene	2.76		1.00	0.330	ug/L			10/22/13 22:57	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/22/13 22:57	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/22/13 22:57	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/22/13 22:57	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/22/13 22:57	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/22/13 22:57	1
n-Propylbenzene	1.40		0.500	0.170	ug/L			10/22/13 22:57	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/22/13 22:57	1
sec-Butylbenzene	0.246 J		0.500	0.170	ug/L			10/22/13 22:57	1
Styrene	<0.500		0.500	0.280	ug/L			10/22/13 22:57	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 22:57	1
Tetrachloroethene	4.38		0.500	0.140	ug/L			10/22/13 22:57	1
Trichloroethene	37.7		0.500	0.200	ug/L			10/22/13 22:57	1
Trichlorofluoromethane	<0.500		0.500	0.210	ug/L			10/22/13 22:57	1
Vinyl chloride	18.2		0.500	0.180	ug/L			10/22/13 22:57	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	121		70 - 130		10/22/13 22:57	1
4-Bromofluorobenzene (Surr)	97		70 - 130		10/22/13 22:57	1
Dibromofluoromethane (Surr)	104		70 - 130		10/22/13 22:57	1
Toluene-d8 (Surr)	96		70 - 130		10/22/13 22:57	1

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-C12	2400		50.0	38.0	ug/L			10/16/13 16:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	92		50 - 150					10/16/13 16:14	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	644 B		490	39.2	ug/L		10/16/13 12:18	10/17/13 17:19	1
ORO C24-C40	249 J		490	39.2	ug/L		10/16/13 12:18	10/17/13 17:19	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	83		50 - 150				10/16/13 12:18	10/17/13 17:19	1

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-116146/7

Matrix: Water

Analysis Batch: 116146

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.500		0.500	0.200	ug/L			10/22/13 14:51	1
Toluene	<0.500		0.500	0.170	ug/L			10/22/13 14:51	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/22/13 14:51	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/22/13 14:51	1
Methyl tert-butyl ether	<0.500		0.500	0.170	ug/L			10/22/13 14:51	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/22/13 14:51	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/22/13 14:51	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/22/13 14:51	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/22/13 14:51	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.00		1.00	0.330	ug/L			10/22/13 14:51	1
1,1-Dichloroethane	<0.500		0.500	0.240	ug/L			10/22/13 14:51	1
1,1-Dichloroethene	<0.500		0.500	0.250	ug/L			10/22/13 14:51	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/22/13 14:51	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/22/13 14:51	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/22/13 14:51	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/22/13 14:51	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 14:51	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/22/13 14:51	1
cis-1,2-Dichloroethene	<0.500		0.500	0.210	ug/L			10/22/13 14:51	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/22/13 14:51	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/22/13 14:51	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/22/13 14:51	1
1,2-Dichloroethane	<0.500		0.500	0.200	ug/L			10/22/13 14:51	1
1,2-Dichloropropane	<0.500		0.500	0.250	ug/L			10/22/13 14:51	1
trans-1,2-Dichloroethene	<0.500		0.500	0.230	ug/L			10/22/13 14:51	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/22/13 14:51	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/22/13 14:51	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/22/13 14:51	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/22/13 14:51	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/22/13 14:51	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/22/13 14:51	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/22/13 14:51	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/22/13 14:51	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/22/13 14:51	1
Acetone	<5.00		5.00	2.66	ug/L			10/22/13 14:51	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/22/13 14:51	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/22/13 14:51	1
Bromoform	<0.500		0.500	0.290	ug/L			10/22/13 14:51	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/22/13 14:51	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/22/13 14:51	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/22/13 14:51	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/22/13 14:51	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/22/13 14:51	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/22/13 14:51	1
Chloroform	<0.500		0.500	0.230	ug/L			10/22/13 14:51	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/22/13 14:51	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/22/13 14:51	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/22/13 14:51	1

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-116146/7

Matrix: Water

Analysis Batch: 116146

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Dichlorodifluoromethane	<0.500		0.500		0.170	ug/L				10/22/13 14:51	1
Hexachloro-1,3-butadiene	<1.00				1.00	0.380	ug/L			10/22/13 14:51	1
Isopropylbenzene	<1.00				1.00	0.330	ug/L			10/22/13 14:51	1
2-Butanone (MEK)	<50.0				50.0	2.64	ug/L			10/22/13 14:51	1
Methylene Chloride	<5.00				5.00	0.220	ug/L			10/22/13 14:51	1
2-Hexanone	<5.00				5.00	1.28	ug/L			10/22/13 14:51	1
Naphthalene	<5.00				5.00	0.210	ug/L			10/22/13 14:51	1
n-Butylbenzene	<0.500				0.500	0.240	ug/L			10/22/13 14:51	1
n-Propylbenzene	<0.500				0.500	0.170	ug/L			10/22/13 14:51	1
p-Isopropyltoluene	<0.500				0.500	0.170	ug/L			10/22/13 14:51	1
sec-Butylbenzene	<0.500				0.500	0.170	ug/L			10/22/13 14:51	1
Styrene	<0.500				0.500	0.280	ug/L			10/22/13 14:51	1
tert-Butylbenzene	<0.500				0.500	0.170	ug/L			10/22/13 14:51	1
Tetrachloroethene	<0.500				0.500	0.140	ug/L			10/22/13 14:51	1
Trichloroethene	<0.500				0.500	0.200	ug/L			10/22/13 14:51	1
Trichlorofluoromethane	<0.500				0.500	0.210	ug/L			10/22/13 14:51	1
Vinyl chloride	<0.500				0.500	0.180	ug/L			10/22/13 14:51	1
MB MB		MB MB		Surrogate		%Recovery		Qualifer		Limits	
1,2-Dichloroethane-d4 (Surr)		98				70 - 130					
4-Bromofluorobenzene (Surr)		97				70 - 130					
Dibromofluoromethane (Surr)		100				70 - 130					
Toluene-d8 (Surr)		99				70 - 130					

Lab Sample ID: LCS 490-116146/3

Matrix: Water

Analysis Batch: 116146

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MB	MB	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
		MB	MB							
Benzene	50.0	44.69		ug/L	89	80 - 121				
Toluene	50.0	45.40		ug/L	91	80 - 126				
Ethylbenzene	50.0	45.73		ug/L	91	80 - 130				
Xylenes, Total	100	88.41		ug/L	88	80 - 132				
Methyl tert-butyl ether	50.0	45.50		ug/L	91	72 - 133				
1,1,1,2-Tetrachloroethane	50.0	46.53		ug/L	93	74 - 135				
1,1,1-Trichloroethane	50.0	48.01		ug/L	96	78 - 135				
1,1,2,2-Tetrachloroethane	50.0	41.01		ug/L	82	69 - 131				
1,1,2-Trichloroethane	50.0	41.72		ug/L	83	80 - 124				
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	47.39		ug/L	95	77 - 129				
1,1-Dichloroethane	50.0	45.84		ug/L	92	78 - 125				
1,1-Dichloroethene	50.0	47.25		ug/L	94	79 - 124				
1,1-Dichloropropene	50.0	45.48		ug/L	91	80 - 122				
1,2,3-Trichlorobenzene	50.0	42.61		ug/L	85	62 - 133				
1,2,3-Trichloropropane	50.0	41.71		ug/L	83	70 - 131				
1,2,4-Trichlorobenzene	50.0	44.23		ug/L	88	63 - 133				
1,2,4-Trimethylbenzene	50.0	44.40		ug/L	89	77 - 126				
1,3,5-Trimethylbenzene	50.0	44.06		ug/L	88	77 - 127				

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI

Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1

SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-116146/3

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Matrix: Water

Analysis Batch: 116146

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.
		Result	Qualifier				
cis-1,2-Dichloroethene	50.0	47.50		ug/L		95	76 - 125
1,2-Dibromo-3-Chloropropane	50.0	43.32		ug/L		87	54 - 125
1,2-Dibromoethane (EDB)	50.0	42.98		ug/L		86	80 - 129
1,2-Dichlorobenzene	50.0	44.22		ug/L		88	80 - 121
1,2-Dichloroethane	50.0	46.91		ug/L		94	77 - 121
1,2-Dichloropropane	50.0	41.04		ug/L		82	75 - 120
trans-1,2-Dichloroethene	50.0	45.80		ug/L		92	79 - 126
cis-1,3-Dichloropropene	50.0	45.86		ug/L		92	74 - 140
1,3-Dichlorobenzene	50.0	44.75		ug/L		89	80 - 122
1,3-Dichloropropane	50.0	41.79		ug/L		84	80 - 125
trans-1,3-Dichloropropene	50.0	45.14		ug/L		90	63 - 134
1,4-Dichlorobenzene	50.0	46.91		ug/L		94	80 - 120
2,2-Dichloropropane	50.0	47.07		ug/L		94	43 - 161
2-Chlorotoluene	50.0	41.91		ug/L		84	75 - 126
4-Chlorotoluene	50.0	43.36		ug/L		87	75 - 130
4-Methyl-2-pentanone (MIBK)	250	206.0		ug/L		82	60 - 137
Acetone	250	219.7		ug/L		88	54 - 145
Bromobenzene	50.0	40.31		ug/L		81	68 - 130
Bromochloromethane	50.0	45.68		ug/L		91	78 - 129
Bromoform	50.0	47.30		ug/L		95	46 - 145
Bromomethane	50.0	45.45		ug/L		91	41 - 150
Carbon disulfide	50.0	45.18		ug/L		90	77 - 126
Carbon tetrachloride	50.0	52.23		ug/L		104	64 - 147
Chlorobenzene	50.0	44.98		ug/L		90	80 - 120
Dibromochloromethane	50.0	47.10		ug/L		94	69 - 133
Chloroethane	50.0	49.72		ug/L		99	72 - 120
Chloroform	50.0	48.21		ug/L		96	73 - 129
Chloromethane	50.0	36.84		ug/L		74	12 - 150
Dibromomethane	50.0	43.11		ug/L		86	71 - 125
Dichlorobromomethane	50.0	46.38		ug/L		93	75 - 129
Dichlorodifluoromethane	50.0	64.55 *		ug/L		129	37 - 127
Hexachloro-1,3-butadiene	50.0	42.57		ug/L		85	49 - 146
Isopropylbenzene	50.0	45.82		ug/L		92	80 - 141
2-Butanone (MEK)	250	219.6		ug/L		88	62 - 133
Methylene Chloride	50.0	42.56		ug/L		85	79 - 123
2-Hexanone	250	205.1		ug/L		82	60 - 142
Naphthalene	50.0	44.09		ug/L		88	62 - 138
n-Butylbenzene	50.0	44.79		ug/L		90	68 - 132
n-Propylbenzene	50.0	43.45		ug/L		87	75 - 129
p-Isopropyltoluene	50.0	45.24		ug/L		90	75 - 128
sec-Butylbenzene	50.0	44.15		ug/L		88	76 - 128
Styrene	50.0	45.86		ug/L		92	80 - 127
tert-Butylbenzene	50.0	43.25		ug/L		86	76 - 126
Tetrachloroethene	50.0	44.24		ug/L		88	80 - 126
Trichloroethene	50.0	44.47		ug/L		89	80 - 123
Trichlorofluoromethane	50.0	57.33		ug/L		115	65 - 124
Vinyl chloride	50.0	52.11		ug/L		104	68 - 120

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-116146/3

Matrix: Water

Analysis Batch: 116146

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	99				70 - 130
4-Bromofluorobenzene (Surr)	93				70 - 130
Dibromofluoromethane (Surr)	104				70 - 130
Toluene-d8 (Surr)	100				70 - 130

Lab Sample ID: LCSD 490-116146/4

Matrix: Water

Analysis Batch: 116146

Analyte	Spike Added	LCS	LCSD	LCSD	Unit	D	%Rec	Limits	%Rec.	RPD	RPD	Limit
		Result	Qualifier	Unit								
Benzene	50.0	44.99		ug/L		90	80 - 121		1	17		
Toluene	50.0	46.16		ug/L		92	80 - 126		2	15		
Ethylbenzene	50.0	46.53		ug/L		93	80 - 130		2	15		
Xylenes, Total	100	89.75		ug/L		90	80 - 132		2	15		
Methyl tert-butyl ether	50.0	45.59		ug/L		91	72 - 133		0	16		
1,1,1,2-Tetrachloroethane	50.0	47.40		ug/L		95	74 - 135		2	16		
1,1,1-Trichloroethane	50.0	49.00		ug/L		98	78 - 135		2	17		
1,1,2,2-Tetrachloroethane	50.0	40.62		ug/L		81	69 - 131		1	20		
1,1,2-Trichloroethane	50.0	42.09		ug/L		84	80 - 124		1	15		
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	47.85		ug/L		96	77 - 129		1	18		
1,1-Dichloroethane	50.0	45.65		ug/L		91	78 - 125		0	17		
1,1-Dichloroethene	50.0	45.87		ug/L		92	79 - 124		3	17		
1,1-Dichloropropene	50.0	46.33		ug/L		93	80 - 122		2	17		
1,2,3-Trichlorobenzene	50.0	44.12		ug/L		88	62 - 133		3	25		
1,2,3-Trichloropropane	50.0	41.92		ug/L		84	70 - 131		1	19		
1,2,4-Trichlorobenzene	50.0	44.34		ug/L		89	63 - 133		0	19		
1,2,4-Trimethylbenzene	50.0	44.60		ug/L		89	77 - 126		0	16		
1,3,5-Trimethylbenzene	50.0	44.31		ug/L		89	77 - 127		1	17		
cis-1,2-Dichloroethene	50.0	47.53		ug/L		95	76 - 125		0	17		
1,2-Dibromo-3-Chloropropane	50.0	43.36		ug/L		87	54 - 125		0	24		
1,2-Dibromoethane (EDB)	50.0	43.79		ug/L		88	80 - 129		2	15		
1,2-Dichlorobenzene	50.0	44.19		ug/L		88	80 - 121		0	15		
1,2-Dichloroethane	50.0	47.41		ug/L		95	77 - 121		1	17		
1,2-Dichloropropene	50.0	41.61		ug/L		83	75 - 120		1	17		
trans-1,2-Dichloroethene	50.0	46.32		ug/L		93	79 - 126		1	16		
cis-1,3-Dichloropropene	50.0	46.66		ug/L		93	74 - 140		2	15		
1,3-Dichlorobenzene	50.0	44.72		ug/L		89	80 - 122		0	15		
1,3-Dichloropropane	50.0	42.55		ug/L		85	80 - 125		2	14		
trans-1,3-Dichloropropene	50.0	45.59		ug/L		91	63 - 134		1	14		
1,4-Dichlorobenzene	50.0	46.59		ug/L		93	80 - 120		1	15		
2,2-Dichloropropane	50.0	47.50		ug/L		95	43 - 161		1	18		
2-Chlorotoluene	50.0	42.03		ug/L		84	75 - 126		0	17		
4-Chlorotoluene	50.0	43.71		ug/L		87	75 - 130		1	18		
4-Methyl-2-pentanone (MIBK)	250	210.2		ug/L		84	60 - 137		2	17		
Acetone	250	223.8		ug/L		90	54 - 145		2	21		
Bromobenzene	50.0	40.38		ug/L		81	68 - 130		0	20		
Bromochloromethane	50.0	45.51		ug/L		91	78 - 129		0	17		

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-116146/4

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analysis Batch: 116146

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.		RPD	RPD Limit
	Added	Result	Qualifier				Limits	RPD		
Bromoform	50.0	48.54		ug/L	97	46 - 145		3	16	
Bromomethane	50.0	54.47		ug/L	109	41 - 150		18	50	
Carbon disulfide	50.0	45.65		ug/L	91	77 - 126		1	21	
Carbon tetrachloride	50.0	52.61		ug/L	105	64 - 147		1	19	
Chlorobenzene	50.0	45.63		ug/L	91	80 - 120		1	14	
Dibromochloromethane	50.0	46.87		ug/L	94	69 - 133		0	15	
Chloroethane	50.0	49.30		ug/L	99	72 - 120		1	20	
Chloroform	50.0	48.78		ug/L	98	73 - 129		1	18	
Chloromethane	50.0	36.10		ug/L	72	12 - 150		2	31	
Dibromomethane	50.0	43.05		ug/L	86	71 - 125		0	16	
Dichlorobromomethane	50.0	47.42		ug/L	95	75 - 129		2	18	
Dichlorodifluoromethane	50.0	64.53 *		ug/L	129	37 - 127		0	18	
Hexachloro-1,3-butadiene	50.0	43.14		ug/L	86	49 - 146		1	23	
Isopropylbenzene	50.0	46.58		ug/L	93	80 - 141		2	16	
2-Butanone (MEK)	250	224.7		ug/L	90	62 - 133		2	19	
Methylene Chloride	50.0	42.39		ug/L	85	79 - 123		0	17	
2-Hexanone	250	209.8		ug/L	84	60 - 142		2	15	
Naphthalene	50.0	44.27		ug/L	89	62 - 138		0	26	
n-Butylbenzene	50.0	44.61		ug/L	89	68 - 132		0	18	
n-Propylbenzene	50.0	43.72		ug/L	87	75 - 129		1	17	
p-Isopropyltoluene	50.0	46.11		ug/L	92	75 - 128		2	16	
sec-Butylbenzene	50.0	44.40		ug/L	89	76 - 128		1	16	
Styrene	50.0	46.60		ug/L	93	80 - 127		2	24	
tert-Butylbenzene	50.0	44.38		ug/L	89	76 - 126		3	16	
Tetrachloroethene	50.0	44.83		ug/L	90	80 - 126		1	16	
Trichloroethene	50.0	44.96		ug/L	90	80 - 123		1	17	
Trichlorofluoromethane	50.0	59.13		ug/L	118	65 - 124		3	18	
Vinyl chloride	50.0	52.56		ug/L	105	68 - 120		1	17	

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	101		70 - 130
4-Bromofluorobenzene (Surr)	92		70 - 130
Dibromofluoromethane (Surr)	103		70 - 130
Toluene-d8 (Surr)	99		70 - 130

Lab Sample ID: 490-37786-1 MS

Client Sample ID: W-94-MW8C
Prep Type: Total/NA

Matrix: Ground Water

Analysis Batch: 116146

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				RPD	RPD Limit
Benzene	<0.500		50.0	47.70		ug/L	95	75 - 133		
Toluene	<0.500		50.0	48.83		ug/L	98	75 - 136		
Ethylbenzene	0.500		50.0	49.59		ug/L	98	79 - 139		
Xylenes, Total	<1.50		100	95.50		ug/L	96	74 - 141		
Methyl tert-butyl ether	<0.500		50.0	47.17		ug/L	94	66 - 141		
1,1,1,2-Tetrachloroethane	<0.500		50.0	50.68		ug/L	101	73 - 141		
1,1,1-Trichloroethane	<0.500		50.0	53.02		ug/L	106	76 - 149		
1,1,2,2-Tetrachloroethane	<0.500		50.0	40.93		ug/L	82	56 - 143		

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-37786-1 MS

Matrix: Ground Water

Analysis Batch: 116146

Client Sample ID: W-94-MW8C
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
1,1,2-Trichloroethane	<0.500		50.0	43.96		ug/L		88	74 - 134
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.00		50.0	49.09		ug/L		98	72 - 148
1,1-Dichloroethane	2.42		50.0	50.72		ug/L		97	71 - 139
1,1-Dichloroethene	42.9		50.0	93.44		ug/L		101	70 - 142
1,1-Dichloropropene	<0.500		50.0	49.29		ug/L		99	76 - 139
1,2,3-Trichlorobenzene	<0.500		50.0	43.27		ug/L		87	55 - 138
1,2,3-Trichloropropane	<0.500		50.0	42.06		ug/L		84	53 - 144
1,2,4-Trichlorobenzene	<0.500		50.0	43.75		ug/L		88	60 - 136
1,2,4-Trimethylbenzene	<0.500		50.0	45.22		ug/L		90	69 - 136
1,3,5-Trimethylbenzene	<0.500		50.0	45.44		ug/L		91	69 - 139
cis-1,2-Dichloroethene	37.1		50.0	87.54		ug/L		101	68 - 138
1,2-Dibromo-3-Chloropropane	<5.00		50.0	44.58		ug/L		89	52 - 126
1,2-Dibromoethane (EDB)	<0.500		50.0	45.21		ug/L		90	75 - 137
1,2-Dichlorobenzene	<0.500		50.0	46.29		ug/L		93	79 - 128
1,2-Dichloroethane	<0.500		50.0	50.06		ug/L		100	64 - 136
1,2-Dichloropropane	<0.500		50.0	43.83		ug/L		88	67 - 131
trans-1,2-Dichloroethene	1.09		50.0	47.77		ug/L		93	66 - 143
cis-1,3-Dichloropropene	<0.500		50.0	47.63		ug/L		95	71 - 141
1,3-Dichlorobenzene	<0.500		50.0	46.20		ug/L		92	77 - 131
1,3-Dichloropropane	<0.500		50.0	43.75		ug/L		87	72 - 134
trans-1,3-Dichloropropene	<0.500		50.0	46.70		ug/L		93	59 - 135
1,4-Dichlorobenzene	<0.500		50.0	46.64		ug/L		93	78 - 126
2,2-Dichloropropane	<0.500		50.0	50.51		ug/L		101	37 - 175
2-Chlorotoluene	<0.500		50.0	43.51		ug/L		87	67 - 138
4-Chlorotoluene	<0.500		50.0	44.66		ug/L		89	69 - 138
4-Methyl-2-pentanone (MIBK)	<5.00		250	217.7		ug/L		87	50 - 147
Acetone	<5.00		250	218.1		ug/L		87	45 - 141
Bromobenzene	<0.500		50.0	41.10		ug/L		82	60 - 138
Bromochloromethane	<0.500		50.0	48.38		ug/L		97	67 - 139
Bromoform	<0.500		50.0	51.11		ug/L		102	42 - 147
Bromomethane	<0.500		50.0	32.34		ug/L		65	16 - 163
Carbon disulfide	<0.500		50.0	42.88		ug/L		86	48 - 152
Carbon tetrachloride	<0.500		50.0	57.02		ug/L		114	62 - 164
Chlorobenzene	<0.500		50.0	48.20		ug/L		96	80 - 129
Dibromochloromethane	<0.500		50.0	50.01		ug/L		100	66 - 140
Chloroethane	<0.500		50.0	45.94		ug/L		92	58 - 137
Chloroform	<0.500		50.0	51.62		ug/L		103	66 - 138
Chloromethane	<0.500		50.0	26.55		ug/L		53	10 - 169
Dibromomethane	<0.500		50.0	44.86		ug/L		90	58 - 140
Dichlorobromomethane	<0.500		50.0	50.42		ug/L		101	70 - 140
Dichlorodifluoromethane	<0.500 *		50.0	32.01		ug/L		64	40 - 127
Hexachloro-1,3-butadiene	<1.00		50.0	35.86		ug/L		72	45 - 155
Isopropylbenzene	<1.00		50.0	49.79		ug/L		100	80 - 153
2-Butanone (MEK)	<50.0		250	228.0		ug/L		91	50 - 138
Methylene Chloride	<5.00		50.0	44.42		ug/L		89	64 - 139
2-Hexanone	<5.00		250	215.9		ug/L		86	50 - 150
Naphthalene	<5.00		50.0	44.07		ug/L		88	55 - 140

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-37786-1 MS

Matrix: Ground Water

Analysis Batch: 116146

Client Sample ID: W-94-MW8C
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
n-Butylbenzene	<0.500		50.0	43.92		ug/L		88	66 - 141
n-Propylbenzene	<0.500		50.0	44.36		ug/L		89	69 - 142
p-Isopropyltoluene	<0.500		50.0	46.29		ug/L		93	71 - 137
sec-Butylbenzene	<0.500		50.0	44.58		ug/L		89	73 - 138
Styrene	<0.500		50.0	50.23		ug/L		100	61 - 148
tert-Butylbenzene	<0.500		50.0	44.91		ug/L		90	70 - 138
Tetrachloroethene	8.63		50.0	57.04		ug/L		97	72 - 145
Trichloroethene	77.6		50.0	128.8		ug/L		102	73 - 144
Trichlorofluoromethane	<0.500		50.0	55.40		ug/L		111	58 - 139
Vinyl chloride	13.2		50.0	56.80		ug/L		87	56 - 129
<hr/>									
Surrogate									
	MS	MS							
	%Recovery	Qualifier			Limits				
1,2-Dichloroethane-d4 (Surr)	105				70 - 130				
4-Bromofluorobenzene (Surr)	91				70 - 130				
Dibromofluoromethane (Surr)	103				70 - 130				
Toluene-d8 (Surr)	99				70 - 130				

Lab Sample ID: 490-37786-1 MSD

Matrix: Ground Water

Analysis Batch: 116146

Client Sample ID: W-94-MW8C
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Benzene	<0.500		50.0	47.45		ug/L		95	75 - 133	1	17
Toluene	<0.500		50.0	48.08		ug/L		96	75 - 136	2	15
Ethylbenzene	0.500		50.0	49.01		ug/L		97	79 - 139	1	15
Xylenes, Total	<1.50		100	94.28		ug/L		94	74 - 141	1	15
Methyl tert-butyl ether	<0.500		50.0	46.57		ug/L		93	66 - 141	1	16
1,1,1,2-Tetrachloroethane	<0.500		50.0	49.76		ug/L		100	73 - 141	2	16
1,1,1-Trichloroethane	<0.500		50.0	52.36		ug/L		105	76 - 149	1	17
1,1,2,2-Tetrachloroethane	<0.500		50.0	41.29		ug/L		83	56 - 143	1	20
1,1,2-Trichloroethane	<0.500		50.0	43.25		ug/L		86	74 - 134	2	15
1,1,2-Trichloro-1,2,2-trifluoroetha ne	<1.00		50.0	47.36		ug/L		95	72 - 148	4	18
1,1-Dichloroethane	2.42		50.0	50.58		ug/L		96	71 - 139	0	17
1,1-Dichloroethene	42.9		50.0	93.95		ug/L		102	70 - 142	1	17
1,1-Dichloropropene	<0.500		50.0	48.64		ug/L		97	76 - 139	1	17
1,2,3-Trichlorobenzene	<0.500		50.0	44.34		ug/L		89	55 - 138	2	25
1,2,3-Trichloropropane	<0.500		50.0	41.96		ug/L		84	53 - 144	0	19
1,2,4-Trichlorobenzene	<0.500		50.0	46.21		ug/L		92	60 - 136	5	19
1,2,4-Trimethylbenzene	<0.500		50.0	45.73		ug/L		91	69 - 136	1	16
1,3,5-Trimethylbenzene	<0.500		50.0	45.44		ug/L		91	69 - 139	0	17
cis-1,2-Dichloroethene	37.1		50.0	90.29		ug/L		106	68 - 138	3	17
1,2-Dibromo-3-Chloropropane	<5.00		50.0	44.82		ug/L		90	52 - 126	1	24
1,2-Dibromoethane (EDB)	<0.500		50.0	44.70		ug/L		89	75 - 137	1	15
1,2-Dichlorobenzene	<0.500		50.0	46.12		ug/L		92	79 - 128	0	15
1,2-Dichloroethane	<0.500		50.0	49.06		ug/L		98	64 - 136	2	17
1,2-Dichloropropene	<0.500		50.0	43.35		ug/L		87	67 - 131	1	17
trans-1,2-Dichloroethene	1.09		50.0	47.67		ug/L		93	66 - 143	0	16

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI

Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1

SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-37786-1 MSD

Matrix: Ground Water

Analysis Batch: 116146

Client Sample ID: W-94-MW8C
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit	
	Result	Qualifier	Added	Result	Qualifier								
cis-1,3-Dichloropropene	<0.500		50.0	46.87		ug/L	94	71 - 141	2	15			
1,3-Dichlorobenzene	<0.500		50.0	46.58		ug/L	93	77 - 131	1	15			
1,3-Dichloropropane	<0.500		50.0	43.29		ug/L	87	72 - 134	1	14			
trans-1,3-Dichloropropene	<0.500		50.0	46.24		ug/L	92	59 - 135	1	14			
1,4-Dichlorobenzene	<0.500		50.0	47.61		ug/L	95	78 - 126	2	15			
2,2-Dichloropropane	<0.500		50.0	49.94		ug/L	100	37 - 175	1	18			
2-Chlorotoluene	<0.500		50.0	43.16		ug/L	86	67 - 138	1	17			
4-Chlorotoluene	<0.500		50.0	44.47		ug/L	89	69 - 138	0	18			
4-Methyl-2-pentanone (MIBK)	<5.00		250	217.4		ug/L	87	50 - 147	0	17			
Acetone	<5.00		250	209.8		ug/L	84	45 - 141	4	21			
Bromobenzene	<0.500		50.0	40.87		ug/L	82	60 - 138	1	20			
Bromochloromethane	<0.500		50.0	47.43		ug/L	95	67 - 139	2	17			
Bromoform	<0.500		50.0	50.39		ug/L	101	42 - 147	1	16			
Bromomethane	<0.500		50.0	38.23		ug/L	76	16 - 163	17	50			
Carbon disulfide	<0.500		50.0	42.82		ug/L	86	48 - 152	0	21			
Carbon tetrachloride	<0.500		50.0	55.83		ug/L	112	62 - 164	2	19			
Chlorobenzene	<0.500		50.0	47.55		ug/L	95	80 - 129	1	14			
Dibromochloromethane	<0.500		50.0	49.15		ug/L	98	66 - 140	2	15			
Chloroethane	<0.500		50.0	45.78		ug/L	92	58 - 137	0	20			
Chloroform	<0.500		50.0	51.24		ug/L	102	66 - 138	1	18			
Chloromethane	<0.500		50.0	26.60		ug/L	53	10 - 169	0	31			
Dibromomethane	<0.500		50.0	44.06		ug/L	88	58 - 140	2	16			
Dichlorobromomethane	<0.500		50.0	50.22		ug/L	100	70 - 140	0	18			
Dichlorodifluoromethane	<0.500 *		50.0	31.04		ug/L	62	40 - 127	3	18			
Hexachloro-1,3-butadiene	<1.00		50.0	40.18		ug/L	80	45 - 155	11	23			
Isopropylbenzene	<1.00		50.0	49.16		ug/L	98	80 - 153	1	16			
2-Butanone (MEK)	<50.0		250	223.2		ug/L	89	50 - 138	2	19			
Methylene Chloride	<5.00		50.0	44.24		ug/L	88	64 - 139	0	17			
2-Hexanone	<5.00		250	214.4		ug/L	86	50 - 150	1	15			
Naphthalene	<5.00		50.0	46.19		ug/L	92	55 - 140	5	26			
n-Butylbenzene	<0.500		50.0	45.16		ug/L	90	66 - 141	3	18			
n-Propylbenzene	<0.500		50.0	44.75		ug/L	89	69 - 142	1	17			
p-Isopropyltoluene	<0.500		50.0	47.71		ug/L	95	71 - 137	3	16			
sec-Butylbenzene	<0.500		50.0	45.26		ug/L	91	73 - 138	2	16			
Styrene	<0.500		50.0	49.43		ug/L	99	61 - 148	2	24			
tert-Butylbenzene	<0.500		50.0	45.66		ug/L	91	70 - 138	2	16			
Tetrachloroethene	8.63		50.0	56.13		ug/L	95	72 - 145	2	16			
Trichloroethene	77.6		50.0	126.8		ug/L	98	73 - 144	2	17			
Trichlorofluoromethane	<0.500		50.0	55.92		ug/L	112	58 - 139	1	18			
Vinyl chloride	13.2		50.0	56.35		ug/L	86	56 - 129	1	17			
Surrogate		MSD	MSD										
Surrogate		%Recovery	Qualifier	Limits									
1,2-Dichloroethane-d4 (Surr)		104		70 - 130									
4-Bromofluorobenzene (Surr)		90		70 - 130									
Dibromofluoromethane (Surr)		104		70 - 130									
Toluene-d8 (Surr)		97		70 - 130									

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-116156/7

Matrix: Water

Analysis Batch: 116156

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.500		0.500	0.200	ug/L			10/23/13 03:36	1
Toluene	<0.500		0.500	0.170	ug/L			10/23/13 03:36	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/23/13 03:36	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/23/13 03:36	1
Methyl tert-butyl ether	<0.500		0.500	0.170	ug/L			10/23/13 03:36	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/23/13 03:36	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/23/13 03:36	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/23/13 03:36	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/23/13 03:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.00		1.00	0.330	ug/L			10/23/13 03:36	1
1,1-Dichloroethane	<0.500		0.500	0.240	ug/L			10/23/13 03:36	1
1,1-Dichloroethene	<0.500		0.500	0.250	ug/L			10/23/13 03:36	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/23/13 03:36	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/23/13 03:36	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/23/13 03:36	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/23/13 03:36	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/23/13 03:36	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/23/13 03:36	1
cis-1,2-Dichloroethene	<0.500		0.500	0.210	ug/L			10/23/13 03:36	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/23/13 03:36	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/23/13 03:36	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/23/13 03:36	1
1,2-Dichloroethane	<0.500		0.500	0.200	ug/L			10/23/13 03:36	1
1,2-Dichloropropane	<0.500		0.500	0.250	ug/L			10/23/13 03:36	1
trans-1,2-Dichloroethene	<0.500		0.500	0.230	ug/L			10/23/13 03:36	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/23/13 03:36	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/23/13 03:36	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/23/13 03:36	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/23/13 03:36	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/23/13 03:36	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/23/13 03:36	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/23/13 03:36	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/23/13 03:36	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/23/13 03:36	1
Acetone	<5.00		5.00	2.66	ug/L			10/23/13 03:36	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/23/13 03:36	1
Bromo(chloromethane	<0.500		0.500	0.150	ug/L			10/23/13 03:36	1
Bromoform	<0.500		0.500	0.290	ug/L			10/23/13 03:36	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/23/13 03:36	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/23/13 03:36	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/23/13 03:36	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/23/13 03:36	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/23/13 03:36	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/23/13 03:36	1
Chloroform	<0.500		0.500	0.230	ug/L			10/23/13 03:36	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/23/13 03:36	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/23/13 03:36	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/23/13 03:36	1

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-116156/7

Matrix: Water

Analysis Batch: 116156

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Dichlorodifluoromethane	<0.500		0.500		0.170	ug/L				10/23/13 03:36	1
Hexachloro-1,3-butadiene	<1.00			1.00	0.380	ug/L				10/23/13 03:36	1
Isopropylbenzene	<1.00			1.00	0.330	ug/L				10/23/13 03:36	1
2-Butanone (MEK)	<50.0			50.0	2.64	ug/L				10/23/13 03:36	1
Methylene Chloride	<5.00			5.00	0.220	ug/L				10/23/13 03:36	1
2-Hexanone	<5.00			5.00	1.28	ug/L				10/23/13 03:36	1
Naphthalene	<5.00			5.00	0.210	ug/L				10/23/13 03:36	1
n-Butylbenzene	<0.500			0.500	0.240	ug/L				10/23/13 03:36	1
n-Propylbenzene	<0.500			0.500	0.170	ug/L				10/23/13 03:36	1
p-Isopropyltoluene	<0.500			0.500	0.170	ug/L				10/23/13 03:36	1
sec-Butylbenzene	<0.500			0.500	0.170	ug/L				10/23/13 03:36	1
Styrene	<0.500			0.500	0.280	ug/L				10/23/13 03:36	1
tert-Butylbenzene	<0.500			0.500	0.170	ug/L				10/23/13 03:36	1
Tetrachloroethene	<0.500			0.500	0.140	ug/L				10/23/13 03:36	1
Trichloroethene	<0.500			0.500	0.200	ug/L				10/23/13 03:36	1
Trichlorofluoromethane	<0.500			0.500	0.210	ug/L				10/23/13 03:36	1
Vinyl chloride	<0.500			0.500	0.180	ug/L				10/23/13 03:36	1
MB MB		MB MB		Surrogate		%Recovery		Qualifer		Limits	
1,2-Dichloroethane-d4 (Surr)		100				70 - 130					
4-Bromofluorobenzene (Surr)		93				70 - 130					
Dibromofluoromethane (Surr)		102				70 - 130					
Toluene-d8 (Surr)		98				70 - 130					

Lab Sample ID: LCS 490-116156/3

Matrix: Water

Analysis Batch: 116156

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	MB	MB	LCS Result	LCS Qualifier	Unit	D	%Rec	Limits	%Rec.
		MB	MB							
Benzene	50.0	44.67		ug/L		89			80 - 121	
Toluene	50.0	45.69		ug/L		91			80 - 126	
Ethylbenzene	50.0	46.08		ug/L		92			80 - 130	
Xylenes, Total	100	90.37		ug/L		90			80 - 132	
Methyl tert-butyl ether	50.0	44.78		ug/L		90			72 - 133	
1,1,1,2-Tetrachloroethane	50.0	47.62		ug/L		95			74 - 135	
1,1,1-Trichloroethane	50.0	49.55		ug/L		99			78 - 135	
1,1,2,2-Tetrachloroethane	50.0	38.18		ug/L		76			69 - 131	
1,1,2-Trichloroethane	50.0	41.56		ug/L		83			80 - 124	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	48.48		ug/L		97			77 - 129	
1,1-Dichloroethane	50.0	45.42		ug/L		91			78 - 125	
1,1-Dichloroethene	50.0	47.86		ug/L		96			79 - 124	
1,1-Dichloropropene	50.0	46.43		ug/L		93			80 - 122	
1,2,3-Trichlorobenzene	50.0	42.88		ug/L		86			62 - 133	
1,2,3-Trichloropropane	50.0	41.34		ug/L		83			70 - 131	
1,2,4-Trichlorobenzene	50.0	43.74		ug/L		87			63 - 133	
1,2,4-Trimethylbenzene	50.0	43.12		ug/L		86			77 - 126	
1,3,5-Trimethylbenzene	50.0	43.43		ug/L		87			77 - 127	

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI

Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1

SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-116156/3

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Matrix: Water

Analysis Batch: 116156

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.
		Result	Qualifier				
cis-1,2-Dichloroethene	50.0	46.75		ug/L		94	76 - 125
1,2-Dibromo-3-Chloropropane	50.0	42.38		ug/L		85	54 - 125
1,2-Dibromoethane (EDB)	50.0	43.76		ug/L		88	80 - 129
1,2-Dichlorobenzene	50.0	43.86		ug/L		88	80 - 121
1,2-Dichloroethane	50.0	47.11		ug/L		94	77 - 121
1,2-Dichloropropane	50.0	41.50		ug/L		83	75 - 120
trans-1,2-Dichloroethene	50.0	44.85		ug/L		90	79 - 126
cis-1,3-Dichloropropene	50.0	44.74		ug/L		89	74 - 140
1,3-Dichlorobenzene	50.0	44.51		ug/L		89	80 - 122
1,3-Dichloropropane	50.0	41.26		ug/L		83	80 - 125
trans-1,3-Dichloropropene	50.0	44.14		ug/L		88	63 - 134
1,4-Dichlorobenzene	50.0	45.48		ug/L		91	80 - 120
2,2-Dichloropropane	50.0	45.32		ug/L		91	43 - 161
2-Chlorotoluene	50.0	40.93		ug/L		82	75 - 126
4-Chlorotoluene	50.0	42.16		ug/L		84	75 - 130
4-Methyl-2-pentanone (MIBK)	250	200.8		ug/L		80	60 - 137
Acetone	250	217.4		ug/L		87	54 - 145
Bromobenzene	50.0	38.95		ug/L		78	68 - 130
Bromochloromethane	50.0	47.00		ug/L		94	78 - 129
Bromoform	50.0	49.22		ug/L		98	46 - 145
Bromomethane	50.0	46.17		ug/L		92	41 - 150
Carbon disulfide	50.0	44.00		ug/L		88	77 - 126
Carbon tetrachloride	50.0	54.05		ug/L		108	64 - 147
Chlorobenzene	50.0	45.41		ug/L		91	80 - 120
Dibromochloromethane	50.0	47.96		ug/L		96	69 - 133
Chloroethane	50.0	50.38		ug/L		101	72 - 120
Chloroform	50.0	49.00		ug/L		98	73 - 129
Chloromethane	50.0	32.58		ug/L		65	12 - 150
Dibromomethane	50.0	44.26		ug/L		89	71 - 125
Dichlorobromomethane	50.0	47.50		ug/L		95	75 - 129
Dichlorodifluoromethane	50.0	59.73		ug/L		119	37 - 127
Hexachloro-1,3-butadiene	50.0	43.17		ug/L		86	49 - 146
Isopropylbenzene	50.0	47.02		ug/L		94	80 - 141
2-Butanone (MEK)	250	217.2		ug/L		87	62 - 133
Methylene Chloride	50.0	43.33		ug/L		87	79 - 123
2-Hexanone	250	202.7		ug/L		81	60 - 142
Naphthalene	50.0	43.59		ug/L		87	62 - 138
n-Butylbenzene	50.0	43.62		ug/L		87	68 - 132
n-Propylbenzene	50.0	42.64		ug/L		85	75 - 129
p-Isopropyltoluene	50.0	45.34		ug/L		91	75 - 128
sec-Butylbenzene	50.0	43.41		ug/L		87	76 - 128
Styrene	50.0	47.75		ug/L		95	80 - 127
tert-Butylbenzene	50.0	43.83		ug/L		88	76 - 126
Tetrachloroethene	50.0	46.73		ug/L		93	80 - 126
Trichloroethene	50.0	47.31		ug/L		95	80 - 123
Trichlorofluoromethane	50.0	51.03		ug/L		102	65 - 124
Vinyl chloride	50.0	50.42		ug/L		101	68 - 120

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-116156/3

Matrix: Water

Analysis Batch: 116156

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	101				70 - 130
4-Bromofluorobenzene (Surr)	90				70 - 130
Dibromofluoromethane (Surr)	103				70 - 130
Toluene-d8 (Surr)	98				70 - 130

Lab Sample ID: LCSD 490-116156/4

Matrix: Water

Analysis Batch: 116156

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits	RPD	RPD Limit
		Result	Qualifier						
Benzene	50.0	44.75		ug/L		89	80 - 121	0	17
Toluene	50.0	46.17		ug/L		92	80 - 126	1	15
Ethylbenzene	50.0	46.31		ug/L		93	80 - 130	1	15
Xylenes, Total	100	90.16		ug/L		90	80 - 132	0	15
Methyl tert-butyl ether	50.0	45.13		ug/L		90	72 - 133	1	16
1,1,1,2-Tetrachloroethane	50.0	47.09		ug/L		94	74 - 135	1	16
1,1,1-Trichloroethane	50.0	49.59		ug/L		99	78 - 135	0	17
1,1,2,2-Tetrachloroethane	50.0	37.81		ug/L		76	69 - 131	1	20
1,1,2-Trichloroethane	50.0	42.11		ug/L		84	80 - 124	1	15
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	48.87		ug/L		98	77 - 129	1	18
1,1-Dichloroethane	50.0	45.51		ug/L		91	78 - 125	0	17
1,1-Dichloroethene	50.0	48.70		ug/L		97	79 - 124	2	17
1,1-Dichloropropene	50.0	46.35		ug/L		93	80 - 122	0	17
1,2,3-Trichlorobenzene	50.0	44.50		ug/L		89	62 - 133	4	25
1,2,3-Trichloropropane	50.0	41.19		ug/L		82	70 - 131	0	19
1,2,4-Trichlorobenzene	50.0	44.31		ug/L		89	63 - 133	1	19
1,2,4-Trimethylbenzene	50.0	43.11		ug/L		86	77 - 126	0	16
1,3,5-Trimethylbenzene	50.0	43.70		ug/L		87	77 - 127	1	17
cis-1,2-Dichloroethene	50.0	46.68		ug/L		93	76 - 125	0	17
1,2-Dibromo-3-Chloropropane	50.0	42.85		ug/L		86	54 - 125	1	24
1,2-Dibromoethane (EDB)	50.0	43.18		ug/L		86	80 - 129	1	15
1,2-Dichlorobenzene	50.0	44.12		ug/L		88	80 - 121	1	15
1,2-Dichloroethane	50.0	46.83		ug/L		94	77 - 121	1	17
1,2-Dichloropropene	50.0	41.09		ug/L		82	75 - 120	1	17
trans-1,2-Dichloroethene	50.0	44.84		ug/L		90	79 - 126	0	16
cis-1,3-Dichloropropene	50.0	44.85		ug/L		90	74 - 140	0	15
1,3-Dichlorobenzene	50.0	44.74		ug/L		89	80 - 122	1	15
1,3-Dichloropropane	50.0	41.76		ug/L		84	80 - 125	1	14
trans-1,3-Dichloropropene	50.0	44.43		ug/L		89	63 - 134	1	14
1,4-Dichlorobenzene	50.0	45.86		ug/L		92	80 - 120	1	15
2,2-Dichloropropene	50.0	45.37		ug/L		91	43 - 161	0	18
2-Chlorotoluene	50.0	41.39		ug/L		83	75 - 126	1	17
4-Chlorotoluene	50.0	42.66		ug/L		85	75 - 130	1	18
4-Methyl-2-pentanone (MIBK)	250	201.2		ug/L		80	60 - 137	0	17
Acetone	250	219.1		ug/L		88	54 - 145	1	21
Bromobenzene	50.0	39.30		ug/L		79	68 - 130	1	20
Bromochloromethane	50.0	46.28		ug/L		93	78 - 129	2	17

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-116156/4

Matrix: Water

Analysis Batch: 116156

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	%Rec.		RPD	RPD	Limit
	Added	Result	Qualifier				Limits	16			
Bromoform	50.0	49.66		ug/L		99	46 - 145		1		16
Bromomethane	50.0	45.01		ug/L		90	41 - 150		3		50
Carbon disulfide	50.0	45.20		ug/L		90	77 - 126		3		21
Carbon tetrachloride	50.0	53.28		ug/L		107	64 - 147		1		19
Chlorobenzene	50.0	45.61		ug/L		91	80 - 120		0		14
Dibromochloromethane	50.0	47.82		ug/L		96	69 - 133		0		15
Chloroethane	50.0	49.92		ug/L		100	72 - 120		1		20
Chloroform	50.0	49.00		ug/L		98	73 - 129		0		18
Chloromethane	50.0	31.48		ug/L		63	12 - 150		3		31
Dibromomethane	50.0	43.57		ug/L		87	71 - 125		2		16
Dichlorobromomethane	50.0	47.46		ug/L		95	75 - 129		0		18
Dichlorodifluoromethane	50.0	58.55		ug/L		117	37 - 127		2		18
Hexachloro-1,3-butadiene	50.0	44.19		ug/L		88	49 - 146		2		23
Isopropylbenzene	50.0	47.16		ug/L		94	80 - 141		0		16
2-Butanone (MEK)	250	217.1		ug/L		87	62 - 133		0		19
Methylene Chloride	50.0	42.99		ug/L		86	79 - 123		1		17
2-Hexanone	250	203.0		ug/L		81	60 - 142		0		15
Naphthalene	50.0	45.78		ug/L		92	62 - 138		5		26
n-Butylbenzene	50.0	44.12		ug/L		88	68 - 132		1		18
n-Propylbenzene	50.0	42.79		ug/L		86	75 - 129		0		17
p-Isopropyltoluene	50.0	45.57		ug/L		91	75 - 128		1		16
sec-Butylbenzene	50.0	43.78		ug/L		88	76 - 128		1		16
Styrene	50.0	47.82		ug/L		96	80 - 127		0		24
tert-Butylbenzene	50.0	43.51		ug/L		87	76 - 126		1		16
Tetrachloroethene	50.0	46.42		ug/L		93	80 - 126		1		16
Trichloroethene	50.0	47.69		ug/L		95	80 - 123		1		17
Trichlorofluoromethane	50.0	49.89		ug/L		100	65 - 124		2		18
Vinyl chloride	50.0	50.57		ug/L		101	68 - 120		0		17

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	100		70 - 130
4-Bromofluorobenzene (Surr)	90		70 - 130
Dibromofluoromethane (Surr)	103		70 - 130
Toluene-d8 (Surr)	98		70 - 130

Lab Sample ID: 440-59604-B-7 MS

Matrix: Water

Analysis Batch: 116156

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.	
	Result	Qualifier	Added	Result	Qualifier				Limits	133
Benzene	<0.500		50.0	44.35		ug/L		89	75 - 133	
Toluene	<0.500		50.0	45.98		ug/L		92	75 - 136	
Ethylbenzene	<0.500		50.0	47.40		ug/L		95	79 - 139	
Xylenes, Total	<1.50		100	92.22		ug/L		92	74 - 141	
Methyl tert-butyl ether	<0.500		50.0	44.00		ug/L		88	66 - 141	
1,1,1,2-Tetrachloroethane	<0.500		50.0	49.32		ug/L		99	73 - 141	
1,1,1-Trichloroethane	<0.500		50.0	51.02		ug/L		102	76 - 149	
1,1,2,2-Tetrachloroethane	<0.500		50.0	39.35		ug/L		79	56 - 143	

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
 SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-59604-B-7 MS

Matrix: Water

Analysis Batch: 116156

Client Sample ID: Matrix Spike
 Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	
	Result	Qualifier	Added	Result	Qualifier					
1,1,2-Trichloroethane	<0.500		50.0	42.36		ug/L		85	74 - 134	
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.00		50.0	48.84		ug/L		98	72 - 148	
1,1-Dichloroethane	<0.500		50.0	45.69		ug/L		91	71 - 139	
1,1-Dichloroethene	<0.500		50.0	44.98		ug/L		90	70 - 142	
1,1-Dichloropropene	<0.500		50.0	45.32		ug/L		91	76 - 139	
1,2,3-Trichlorobenzene	<0.500		50.0	42.26		ug/L		85	55 - 138	
1,2,3-Trichloropropane	<0.500		50.0	40.77		ug/L		82	53 - 144	
1,2,4-Trichlorobenzene	<0.500		50.0	44.70		ug/L		89	60 - 136	
1,2,4-Trimethylbenzene	<0.500		50.0	44.67		ug/L		89	69 - 136	
1,3,5-Trimethylbenzene	<0.500		50.0	45.03		ug/L		90	69 - 139	
cis-1,2-Dichloroethene	<0.500		50.0	47.28		ug/L		95	68 - 138	
1,2-Dibromo-3-Chloropropane	<5.00		50.0	42.58		ug/L		85	52 - 126	
1,2-Dibromoethane (EDB)	<0.500		50.0	43.15		ug/L		86	75 - 137	
1,2-Dichlorobenzene	<0.500		50.0	45.88		ug/L		92	79 - 128	
1,2-Dichloroethane	<0.500		50.0	46.38		ug/L		93	64 - 136	
1,2-Dichloropropane	<0.500		50.0	41.46		ug/L		83	67 - 131	
trans-1,2-Dichloroethene	<0.500		50.0	42.33		ug/L		85	66 - 143	
cis-1,3-Dichloropropene	<0.500		50.0	45.39		ug/L		91	71 - 141	
1,3-Dichlorobenzene	<0.500		50.0	46.39		ug/L		93	77 - 131	
1,3-Dichloropropane	<0.500		50.0	41.75		ug/L		84	72 - 134	
trans-1,3-Dichloropropene	<0.500		50.0	44.34		ug/L		89	59 - 135	
1,4-Dichlorobenzene	<0.500		50.0	47.60		ug/L		95	78 - 126	
2,2-Dichloropropane	<0.500		50.0	49.97		ug/L		100	37 - 175	
2-Chlorotoluene	<0.500		50.0	42.78		ug/L		86	67 - 138	
4-Chlorotoluene	<0.500		50.0	44.01		ug/L		88	69 - 138	
4-Methyl-2-pentanone (MIBK)	<5.00		250	195.2		ug/L		78	50 - 147	
Acetone	<5.00		250	190.1		ug/L		76	45 - 141	
Bromobenzene	<0.500		50.0	40.00		ug/L		80	60 - 138	
Bromochloromethane	<0.500		50.0	46.92		ug/L		94	67 - 139	
Bromoform	<0.500		50.0	48.87		ug/L		98	42 - 147	
Bromomethane	<0.500		50.0	38.87		ug/L		78	16 - 163	
Carbon disulfide	<0.500		50.0	34.34		ug/L		69	48 - 152	
Carbon tetrachloride	<0.500		50.0	55.31		ug/L		111	62 - 164	
Chlorobenzene	<0.500		50.0	46.69		ug/L		93	80 - 129	
Dibromochloromethane	<0.500		50.0	48.85		ug/L		98	66 - 140	
Chloroethane	<0.500		50.0	42.11		ug/L		84	58 - 137	
Chloroform	<0.500		50.0	50.57		ug/L		101	66 - 138	
Chloromethane	<0.500		50.0	22.00		ug/L		44	10 - 169	
Dibromomethane	<0.500		50.0	43.74		ug/L		87	58 - 140	
Dichlorobromomethane	<0.500		50.0	48.82		ug/L		98	70 - 140	
Dichlorodifluoromethane	<0.500		50.0	27.91		ug/L		56	40 - 127	
Hexachloro-1,3-butadiene	<1.00		50.0	43.95		ug/L		88	45 - 155	
Isopropylbenzene	<1.00		50.0	49.39		ug/L		99	80 - 153	
2-Butanone (MEK)	<50.0		250	210.4		ug/L		84	50 - 138	
Methylene Chloride	<5.00		50.0	41.91		ug/L		84	64 - 139	
2-Hexanone	<5.00		250	190.8		ug/L		76	50 - 150	
Naphthalene	<5.00		50.0	42.17		ug/L		84	55 - 140	

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-59604-B-7 MS

Matrix: Water

Analysis Batch: 116156

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
n-Butylbenzene	<0.500		50.0	45.97		ug/L		92	66 - 141
n-Propylbenzene	<0.500		50.0	44.01		ug/L		88	69 - 142
p-Isopropyltoluene	<0.500		50.0	47.09		ug/L		94	71 - 137
sec-Butylbenzene	<0.500		50.0	45.62		ug/L		91	73 - 138
Styrene	<0.500		50.0	49.29		ug/L		99	61 - 148
tert-Butylbenzene	<0.500		50.0	45.17		ug/L		90	70 - 138
Tetrachloroethene	<0.500		50.0	47.33		ug/L		95	72 - 145
Trichloroethene	<0.500		50.0	46.96		ug/L		94	73 - 144
Trichlorofluoromethane	<0.500		50.0	54.25		ug/L		109	58 - 139
Vinyl chloride	<0.500		50.0	36.28		ug/L		73	56 - 129
<hr/>									
Surrogate									
	MS	MS							
	%Recovery	Qualifier				Limits			
1,2-Dichloroethane-d4 (Surr)	100					70 - 130			
4-Bromofluorobenzene (Surr)	89					70 - 130			
Dibromofluoromethane (Surr)	105					70 - 130			
Toluene-d8 (Surr)	98					70 - 130			

Lab Sample ID: 440-59604-C-7 MSD

Matrix: Water

Analysis Batch: 116156

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Benzene	<0.500		50.0	42.66		ug/L		85	75 - 133	4	17
Toluene	<0.500		50.0	44.48		ug/L		89	75 - 136	3	15
Ethylbenzene	<0.500		50.0	45.57		ug/L		91	79 - 139	4	15
Xylenes, Total	<1.50		100	88.87		ug/L		89	74 - 141	4	15
Methyl tert-butyl ether	<0.500		50.0	42.86		ug/L		86	66 - 141	3	16
1,1,1,2-Tetrachloroethane	<0.500		50.0	47.56		ug/L		95	73 - 141	4	16
1,1,1-Trichloroethane	<0.500		50.0	48.97		ug/L		98	76 - 149	4	17
1,1,2,2-Tetrachloroethane	<0.500		50.0	38.26		ug/L		77	56 - 143	3	20
1,1,2-Trichloroethane	<0.500		50.0	41.42		ug/L		83	74 - 134	2	15
1,1,2-Trichloro-1,2,2-trifluoroetha ne	<1.00		50.0	46.89		ug/L		94	72 - 148	4	18
1,1-Dichloroethane	<0.500		50.0	43.94		ug/L		88	71 - 139	4	17
1,1-Dichloroethene	<0.500		50.0	43.98		ug/L		88	70 - 142	2	17
1,1-Dichloropropene	<0.500		50.0	43.83		ug/L		88	76 - 139	3	17
1,2,3-Trichlorobenzene	<0.500		50.0	42.36		ug/L		85	55 - 138	0	25
1,2,3-Trichloropropane	<0.500		50.0	39.82		ug/L		80	53 - 144	2	19
1,2,4-Trichlorobenzene	<0.500		50.0	43.29		ug/L		87	60 - 136	3	19
1,2,4-Trimethylbenzene	<0.500		50.0	43.05		ug/L		86	69 - 136	4	16
1,3,5-Trimethylbenzene	<0.500		50.0	42.93		ug/L		86	69 - 139	5	17
cis-1,2-Dichloroethene	<0.500		50.0	45.64		ug/L		91	68 - 138	4	17
1,2-Dibromo-3-Chloropropane	<5.00		50.0	41.55		ug/L		83	52 - 126	2	24
1,2-Dibromoethane (EDB)	<0.500		50.0	42.25		ug/L		84	75 - 137	2	15
1,2-Dichlorobenzene	<0.500		50.0	43.74		ug/L		87	79 - 128	5	15
1,2-Dichloroethane	<0.500		50.0	44.76		ug/L		90	64 - 136	4	17
1,2-Dichloropropene	<0.500		50.0	40.21		ug/L		80	67 - 131	3	17
trans-1,2-Dichloroethene	<0.500		50.0	40.70		ug/L		81	66 - 143	4	16

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI

Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1

SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 440-59604-C-7 MSD

Matrix: Water

Analysis Batch: 116156

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
cis-1,3-Dichloropropene	<0.500		50.0	43.93		ug/L		88	71 - 141	3	15	
1,3-Dichlorobenzene	<0.500		50.0	44.13		ug/L		88	77 - 131	5	15	
1,3-Dichloropropane	<0.500		50.0	40.08		ug/L		80	72 - 134	4	14	
trans-1,3-Dichloropropene	<0.500		50.0	43.34		ug/L		87	59 - 135	2	14	
1,4-Dichlorobenzene	<0.500		50.0	45.60		ug/L		91	78 - 126	4	15	
2,2-Dichloropropane	<0.500		50.0	47.72		ug/L		95	37 - 175	5	18	
2-Chlorotoluene	<0.500		50.0	40.31		ug/L		81	67 - 138	6	17	
4-Chlorotoluene	<0.500		50.0	41.90		ug/L		84	69 - 138	5	18	
4-Methyl-2-pentanone (MIBK)	<5.00		250	191.3		ug/L		77	50 - 147	2	17	
Acetone	<5.00		250	204.8		ug/L		82	45 - 141	7	21	
Bromobenzene	<0.500		50.0	37.76		ug/L		76	60 - 138	6	20	
Bromochloromethane	<0.500		50.0	44.78		ug/L		90	67 - 139	5	17	
Bromoform	<0.500		50.0	48.20		ug/L		96	42 - 147	1	16	
Bromomethane	<0.500		50.0	43.85		ug/L		88	16 - 163	12	50	
Carbon disulfide	<0.500		50.0	32.63		ug/L		65	48 - 152	5	21	
Carbon tetrachloride	<0.500		50.0	51.94		ug/L		104	62 - 164	6	19	
Chlorobenzene	<0.500		50.0	45.17		ug/L		90	80 - 129	3	14	
Dibromochloromethane	<0.500		50.0	47.01		ug/L		94	66 - 140	4	15	
Chloroethane	<0.500		50.0	39.64		ug/L		79	58 - 137	6	20	
Chloroform	<0.500		50.0	48.60		ug/L		97	66 - 138	4	18	
Chloromethane	<0.500		50.0	21.77		ug/L		44	10 - 169	1	31	
Dibromomethane	<0.500		50.0	41.80		ug/L		84	58 - 140	5	16	
Dichlorobromomethane	<0.500		50.0	47.42		ug/L		95	70 - 140	3	18	
Dichlorodifluoromethane	<0.500		50.0	27.45		ug/L		55	40 - 127	2	18	
Hexachloro-1,3-butadiene	<1.00		50.0	44.77		ug/L		90	45 - 155	2	23	
Isopropylbenzene	<1.00		50.0	47.53		ug/L		95	80 - 153	4	16	
2-Butanone (MEK)	<50.0		250	204.0		ug/L		82	50 - 138	3	19	
Methylene Chloride	<5.00		50.0	39.23		ug/L		78	64 - 139	7	17	
2-Hexanone	<5.00		250	188.1		ug/L		75	50 - 150	1	15	
Naphthalene	<5.00		50.0	42.35		ug/L		85	55 - 140	0	26	
n-Butylbenzene	<0.500		50.0	44.58		ug/L		89	66 - 141	3	18	
n-Propylbenzene	<0.500		50.0	42.11		ug/L		84	69 - 142	4	17	
p-Isopropyltoluene	<0.500		50.0	45.45		ug/L		91	71 - 137	4	16	
sec-Butylbenzene	<0.500		50.0	43.94		ug/L		88	73 - 138	4	16	
Styrene	<0.500		50.0	47.41		ug/L		95	61 - 148	4	24	
tert-Butylbenzene	<0.500		50.0	43.70		ug/L		87	70 - 138	3	16	
Tetrachloroethene	<0.500		50.0	45.65		ug/L		91	72 - 145	4	16	
Trichloroethene	<0.500		50.0	45.05		ug/L		90	73 - 144	4	17	
Trichlorofluoromethane	<0.500		50.0	52.04		ug/L		104	58 - 139	4	18	
Vinyl chloride	<0.500		50.0	35.32		ug/L		71	56 - 129	3	17	

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	100		70 - 130
4-Bromofluorobenzene (Surr)	89		70 - 130
Dibromofluoromethane (Surr)	103		70 - 130
Toluene-d8 (Surr)	98		70 - 130

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
SDG: 08115513

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Lab Sample ID: MB 490-114647/8

Matrix: Water

Analysis Batch: 114647

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
C4-C12	<50.0		50.0	38.0	ug/L			10/16/13 11:42	1
Surrogate	MB	MB	Limits			D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
a,a,a-Trifluorotoluene	101		50 - 150					10/16/13 11:42	1

Lab Sample ID: LCS 490-114647/6

Matrix: Water

Analysis Batch: 114647

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	MB	MB	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Result	Qualifier							
C4-C12			1000	1052		ug/L		105	57 - 140
Surrogate	MB	MB	Limits				D	%Rec.	Limits
	%Recovery	Qualifier							
a,a,a-Trifluorotoluene	88		50 - 150						

Lab Sample ID: LCSD 490-114647/7

Matrix: Water

Analysis Batch: 114647

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	MB	MB	Spike	LCSD	LCSD	Unit	D	%Rec.	RPD	Limit
	Result	Qualifier								
C4-C12			1000	1046		ug/L		105	57 - 140	1
Surrogate	MB	MB	Limits				D	%Rec.	RPD	Limit
	%Recovery	Qualifier								
a,a,a-Trifluorotoluene	89		50 - 150							

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 490-114790/1-A

Matrix: Water

Analysis Batch: 115116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 114790

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics [C10-C28]	47.75	J	500	40.0	ug/L		10/16/13 12:18	10/17/13 14:44	1
Surrogate	MB	MB	Limits			D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
ORO C24-C40	<500		500	40.0	ug/L		10/16/13 12:18	10/17/13 14:44	1
Surrogate	MB	MB	Limits			D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
o-Terphenyl (Sur)	85		50 - 150				10/16/13 12:18	10/17/13 14:44	1

Lab Sample ID: LCS 490-114790/2-A

Matrix: Water

Analysis Batch: 115116

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 114790

Analyte	MB	MB	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Result	Qualifier							
Diesel Range Organics [C10-C28]			800	888.5		ug/L		111	46 - 132

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI

Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1

SDG: 08115513

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 490-114790/2-A

Matrix: Water

Analysis Batch: 115116

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 114790

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
o-Terphenyl (Surrogate)	94		50 - 150

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TestAmerica Nashville

QC Association Summary

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
SDG: 08115513

GC/MS VOA

Analysis Batch: 116146

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-37786-1	W-94-MW8C	Total/NA	Ground Water	8260B	
490-37786-1 MS	W-94-MW8C	Total/NA	Ground Water	8260B	
490-37786-1 MSD	W-94-MW8C	Total/NA	Ground Water	8260B	
490-37786-4	W-94-MW10C	Total/NA	Ground Water	8260B	
490-37786-5	QCTB	Total/NA	Water	8260B	
490-37786-6	W-95-MW7A	Total/NA	Ground Water	8260B	
490-37786-7	W-95-MW7B	Total/NA	Ground Water	8260B	
490-37786-8	W-95-MW7C	Total/NA	Ground Water	8260B	
490-37786-9	W-96-MW8A	Total/NA	Ground Water	8260B	
490-37786-10	W-95-MW8B	Total/NA	Ground Water	8260B	
LCS 490-116146/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-116146/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-116146/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 116156

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
440-59604-B-7 MS	Matrix Spike	Total/NA	Water	8260B	
440-59604-C-7 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	
490-37786-2	W-95-MW10A	Total/NA	Ground Water	8260B	
490-37786-3	W-94-MW10B	Total/NA	Ground Water	8260B	
LCS 490-116156/3	Lab Control Sample	Total/NA	Water	8260B	
LCSD 490-116156/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-116156/7	Method Blank	Total/NA	Water	8260B	

GC VOA

Analysis Batch: 114647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-37786-1	W-94-MW8C	Total/NA	Ground Water	8015B GRO LL	
490-37786-2	W-95-MW10A	Total/NA	Ground Water	8015B GRO LL	
490-37786-3	W-94-MW10B	Total/NA	Ground Water	8015B GRO LL	
490-37786-4	W-94-MW10C	Total/NA	Ground Water	8015B GRO LL	
490-37786-6	W-95-MW7A	Total/NA	Ground Water	8015B GRO LL	
490-37786-7	W-95-MW7B	Total/NA	Ground Water	8015B GRO LL	
490-37786-8	W-95-MW7C	Total/NA	Ground Water	8015B GRO LL	
490-37786-9	W-96-MW8A	Total/NA	Ground Water	8015B GRO LL	
490-37786-10	W-95-MW8B	Total/NA	Ground Water	8015B GRO LL	
LCS 490-114647/6	Lab Control Sample	Total/NA	Water	8015B GRO LL	
LCSD 490-114647/7	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	
MB 490-114647/8	Method Blank	Total/NA	Water	8015B GRO LL	

GC Semi VOA

Prep Batch: 114790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-37786-1	W-94-MW8C	Total/NA	Ground Water	3510C	
490-37786-2	W-95-MW10A	Total/NA	Ground Water	3510C	
490-37786-3	W-94-MW10B	Total/NA	Ground Water	3510C	
490-37786-4	W-94-MW10C	Total/NA	Ground Water	3510C	
490-37786-6	W-95-MW7A	Total/NA	Ground Water	3510C	

TestAmerica Nashville

QC Association Summary

Client: Cardno ERI

Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1

SDG: 08115513

GC Semi VOA (Continued)

Prep Batch: 114790 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-37786-7	W-95-MW7B	Total/NA	Ground Water	3510C	
490-37786-8	W-95-MW7C	Total/NA	Ground Water	3510C	
490-37786-9	W-96-MW8A	Total/NA	Ground Water	3510C	
490-37786-10	W-95-MW8B	Total/NA	Ground Water	3510C	
LCS 490-114790/2-A	Lab Control Sample	Total/NA	Water	3510C	
MB 490-114790/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 115116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-37786-1	W-94-MW8C	Total/NA	Ground Water	8015B	114790
490-37786-2	W-95-MW10A	Total/NA	Ground Water	8015B	114790
490-37786-3	W-94-MW10B	Total/NA	Ground Water	8015B	114790
490-37786-4	W-94-MW10C	Total/NA	Ground Water	8015B	114790
490-37786-6	W-95-MW7A	Total/NA	Ground Water	8015B	114790
490-37786-7	W-95-MW7B	Total/NA	Ground Water	8015B	114790
490-37786-8	W-95-MW7C	Total/NA	Ground Water	8015B	114790
490-37786-9	W-96-MW8A	Total/NA	Ground Water	8015B	114790
490-37786-10	W-95-MW8B	Total/NA	Ground Water	8015B	114790
LCS 490-114790/2-A	Lab Control Sample	Total/NA	Water	8015B	114790
MB 490-114790/1-A	Method Blank	Total/NA	Water	8015B	114790

Lab Chronicle

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
SDG: 08115513

Client Sample ID: W-94-MW8C

Lab Sample ID: 490-37786-1
Matrix: Ground Water

Date Collected: 10/10/13 12:45
Date Received: 10/15/13 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	116146	10/22/13 15:46	BJM	TAL NSH
Total/NA	Analysis	8015B GRO LL		1	114647	10/16/13 12:12	GWM	TAL NSH
Total/NA	Prep	3510C			114790	10/16/13 12:18	FXM	TAL NSH
Total/NA	Analysis	8015B		1	115116	10/17/13 15:15	JLF	TAL NSH

Client Sample ID: W-95-MW10A

Lab Sample ID: 490-37786-2
Matrix: Ground Water

Date Collected: 10/10/13 14:56
Date Received: 10/15/13 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	116156	10/23/13 10:33	BJM	TAL NSH
Total/NA	Analysis	8015B GRO LL		1	114647	10/16/13 12:43	GWM	TAL NSH
Total/NA	Prep	3510C			114790	10/16/13 12:18	FXM	TAL NSH
Total/NA	Analysis	8015B		1	115116	10/17/13 15:30	JLF	TAL NSH

Client Sample ID: W-94-MW10B

Lab Sample ID: 490-37786-3
Matrix: Ground Water

Date Collected: 10/10/13 15:42
Date Received: 10/15/13 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	116156	10/23/13 11:01	BJM	TAL NSH
Total/NA	Analysis	8015B GRO LL		1	114647	10/16/13 13:13	GWM	TAL NSH
Total/NA	Prep	3510C			114790	10/16/13 12:18	FXM	TAL NSH
Total/NA	Analysis	8015B		1	115116	10/17/13 15:46	JLF	TAL NSH

Client Sample ID: W-94-MW10C

Lab Sample ID: 490-37786-4
Matrix: Ground Water

Date Collected: 10/10/13 16:42
Date Received: 10/15/13 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	116146	10/22/13 20:38	BJM	TAL NSH
Total/NA	Analysis	8015B GRO LL		1	114647	10/16/13 13:43	GWM	TAL NSH
Total/NA	Prep	3510C			114790	10/16/13 12:18	FXM	TAL NSH
Total/NA	Analysis	8015B		1	115116	10/17/13 16:01	JLF	TAL NSH

Client Sample ID: QCTB

Lab Sample ID: 490-37786-5
Matrix: Water

Date Collected: 10/10/13 06:00
Date Received: 10/15/13 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	116146	10/22/13 15:18	BJM	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
SDG: 08115513

Client Sample ID: W-95-MW7A

Date Collected: 10/10/13 13:18
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-6
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	116146	10/22/13 21:06	BJM	TAL NSH
Total/NA	Analysis	8015B GRO LL		1	114647	10/16/13 14:13	GWM	TAL NSH
Total/NA	Prep	3510C			114790	10/16/13 12:18	FXM	TAL NSH
Total/NA	Analysis	8015B		1	115116	10/17/13 16:17	JLF	TAL NSH

Client Sample ID: W-95-MW7B

Date Collected: 10/10/13 13:43
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-7
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	116146	10/22/13 21:34	BJM	TAL NSH
Total/NA	Analysis	8015B GRO LL		1	114647	10/16/13 14:43	GWM	TAL NSH
Total/NA	Prep	3510C			114790	10/16/13 12:18	FXM	TAL NSH
Total/NA	Analysis	8015B		1	115116	10/17/13 16:32	JLF	TAL NSH

Client Sample ID: W-95-MW7C

Date Collected: 10/10/13 14:11
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-8
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	116146	10/22/13 22:01	BJM	TAL NSH
Total/NA	Analysis	8015B GRO LL		1	114647	10/16/13 15:13	GWM	TAL NSH
Total/NA	Prep	3510C			114790	10/16/13 12:18	FXM	TAL NSH
Total/NA	Analysis	8015B		1	115116	10/17/13 19:24	JLF	TAL NSH

Client Sample ID: W-96-MW8A

Date Collected: 10/10/13 11:51
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-9
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	116146	10/22/13 22:29	BJM	TAL NSH
Total/NA	Analysis	8015B GRO LL		1	114647	10/16/13 15:44	GWM	TAL NSH
Total/NA	Prep	3510C			114790	10/16/13 12:18	FXM	TAL NSH
Total/NA	Analysis	8015B		1	115116	10/17/13 17:04	JLF	TAL NSH

Client Sample ID: W-95-MW8B

Date Collected: 10/10/13 12:17
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-10
Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	116146	10/22/13 22:57	BJM	TAL NSH
Total/NA	Analysis	8015B GRO LL		1	114647	10/16/13 16:14	GWM	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1
SDG: 08115513

Client Sample ID: W-95-MW8B

Date Collected: 10/10/13 12:17

Date Received: 10/15/13 08:15

Lab Sample ID: 490-37786-10

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Prep	3510C			114790	10/16/13 12:18	FXM	TAL NSH
Total/NA	Analysis	8015B		1	115116	10/17/13 17:19	JLF	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

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TestAmerica Nashville

Method Summary

Client: Cardno ERI

Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1

SDG: 08115513

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8015B GRO LL	Gasoline Range Organics - (GC)	SW846	TAL NSH
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Cardno ERI

Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37786-1

SDG: 08115513

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	1168CA	10-31-13

The following analytes are included in this report, but are not certified under this certification:

Analysis Method	Prep Method	Matrix	Analyte
8015B	3510C	Ground Water	ORO C24-C40
8015B	3510C	Water	ORO C24-C40

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260B		Ground Water	1,1,2-Trichloro-1,2,2-trifluoroethane
8260B		Ground Water	p-Isopropyltoluene
8260B		Water	1,1,2-Trichloro-1,2,2-trifluoroethane
8260B		Water	p-Isopropyltoluene

COOLER RECEIPT FORM

Cooler Received/Opened On 10/15/2013 @ 08151. Tracking # 8457 (last 4 digits, FedEx)Courier: FedEx IR Gun ID 946602202. Temperature of rep. sample or temp blank when opened: 3.5 Degrees Celsius3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA4. Were custody seals on outside of cooler? YES...NO...NAIf yes, how many and where: (0)Front5. Were the seals intact, signed, and dated correctly? YES...NO...NA6. Were custody papers inside cooler? YES...NO...NAI certify that I opened the cooler and answered questions 1-6 (initial) MJM7. Were custody seals on containers: YES NO and Intact YES...NO NAWere these signed and dated correctly? YES...NO NA8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None

10. Did all containers arrive in good condition (unbroken)? YES...NO...NA

11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA

12. Did all container labels and tags agree with custody papers? 10/15/13 YES...NO...NA

13a. Were VOA vials received?

b. Was there any observable headspace present in any VOA vial? YES...NO...NA

14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # AJHI certify that I unloaded the cooler and answered questions 7-14 (initial) AJH15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO NAb. Did the bottle labels indicate that the correct preservatives were used YES...NO NA16. Was residual chlorine present? YES...NO NAI certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) AJH

17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA

18. Did you sign the custody papers in the appropriate place? YES...NO...NA

19. Were correct containers used for the analysis requested? YES...NO...NA

20. Was sufficient amount of sample sent in each container? YES...NO...NA

I certify that I entered this project into LIMS and answered questions 17-20 (initial)I certify that I attached a label with the unique LIMS number to each container (initial) AJH21. Were there Non-Conformance issues at login? YES NO Was a NCM generated? YES NO ...# 84845AJH10/15/13AJH10/15/13

Time On
MW 8:33
Says 12:17
Chain says
1:47



Nashville Division

Phone: 615-726-0177

2960 Foster Creighton

Toll Free: 800-765-0980

Nashville, TN 37204

Fax: 615-726-3404

Loc: 490
37786



Consultant Name: Cardno ERI

Account #: N/A

PO#: 4502260554

page 2 of 2

Consultant Address: 4572 Telephone Road, Suite 916

Invoice To: Marla Madden

Consultant City/State/Zip: Ventura, CA 93003

Report To: Alex Fuentes

ExxonMobil Project Mgr: Marla Madden

ERI Project #/Activity #: 08115513

Consultant Project Mgr: James Anderson

ExxonMobil Site #: Former Jalk Fee

AFE #: XA.2011.53908

Consultant Telephone Number: (805) 644-4157 x 181802

Fax No.: (805) 644-5610

Site Address: 10607 Norwalk Blvd.

Sampler Name (Print): Alex Chaiwitz

Site City, State, Zip: Santa Fe Springs, CA 90670

Sampler Signature:

Oversight Agency: CRWQCB-LAR

Sample ID	Field Point Name/ Location ID	Date Sampled	Time Sampled	No. of Containers Shipped	Preservative	Matrix	Analyze For:		RUSH TAT (24 hour)	5-day TAT	Standard 10-day TAT	Due Date of Report
							Other (specify):					
W-94 -MW8C	MW8C	10/10/13	1245	7	X				X	X	X	X
W-94 -MW8A	MW8A	10/10/13		7	X				X	X	X	X
W-94 -MW8B	MW8B	10/10/13		7	X				X	X	X	X
W-94 -MW8C	MW8C	10/10/13		7	X				X	X	X	X
W-95 -MW10A	MW10A	10/10/13	1450	7	X				X	X	X	X
W-94 -MW10B	MW10B	10/10/13	1542	7	X				X	X	X	X
W-94 -MW10C	MW10C	10/10/13	1642	7	X				X	X	X	X
QCTB	QCTB	10/10/13	0600	3	X				X			X

Comments/Special Instructions:
Exclude oxygenates from 8260B analysis

PLEASE E-MAIL ALL PDF FILES TO
alexander.fuentes@cardno.com
geotracker08@eri-us.com)

GLOBAL ID # SL184801463 / ERIL

Laboratory Comments:
Temperature Upon Receipt: 21.4/0.7°C
Sample Containers Intact? Y N
VOA Vials Free of Headspace? Y N

Relinquished by:

Date: 10-10-13

Time: 1941

Received by:

Cardno ERI

Date: 10-10-13

Time: 1941

Relinquished by:

Date: 10-11-13

Time: 15:10

Received by (Last personnel): Maty Munn

Date: 10-11-13

Time: 15:10

For: A. Fuentes
Via Email

Date: 10-11-13

Time: 18:55

Received by (Last personnel): Adam Blushaw

Date: 10-11-13

Time: 18:55

Comments:
10/14/13 17:00 Adam Blushaw 10/15/13 2:55 3:55



Nashville Division

Phone: 615-726-0177

2960 Foster Creighton

Toll Free: 800-765-0980

Nashville, TN 37204

Fax: 615-726-3404

Loc: 490
37786

ExxonMobil

page 1 of 2

Consultant Name: Cardno ERI

Account #: N/A
PO#: 4502260554

Consultant Address: 4572 Telephone Road, Suite 916

Invoice To: Marla Madden

Consultant City/State/Zip: Ventura, CA 93003

Report To: Alex Fuentes

ExxonMobil Project Mgr: Marla Madden

ERI Project #/Activity #: 08115613

Consultant Project Mgr: James Anderson

ExxonMobil Site #: Former Jalk Fee

AFE #: XA.2011.53908

Consultant Telephone Number: (805) 644-4157 x 181802

Fax No.: (805) 644-5610

Site Address: 10607 Norwalk Blvd.

Sampler Name (Print): Alex Chairez

Site City, State, Zip: Santa Fe Springs, CA 90670

Sampler Signature:

Oversight Agency: CRWQCB-LAR

Sample ID	Field Point Name/ Location ID	Date Sampled	Time Sampled	No. of Containers Shipped	Preservative	Matrix	Analyze For:	RUSH TAT (24 hour)	5-day TAT	Standard 10-day TAT	Due Date of Report
W-11-MW1	MW1	10/10/13	10:10	7	X						X
W-11-MW5	MW5	10/10/13	10:10	7	X						X
W-11-MW6A	MW6A	10/10/13	10:10	7	X						X
W-11-MW6B	MW6B	10/10/13	10:10	7	X						X
W-11-MW8C	MW8C	10/10/13	10:10	7	X						X
W-95-MW7A	MW7A	10/10/13	13:18	7	X						X
W-95-MW7B	MW7B	10/10/13	13:13	7	X						X
W-95-MW7C	MW7C	10/10/13	14:11	7	X						X
W-95-MW8A	MW8A	10/10/13	11:51	7	X						X
W-95-MW8B	MW8B	10/10/13	14:17	7	X						X

Comments/Special Instructions:

Exclude oxygenates from 8260B analysis

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alexander.fuentes@cardno.com

geotracker08@eri-us.com)

Laboratory Comments:

Temperature Upon Receipt:

2.1-6/0.7 °C

Y

N

Sample Containers Intact?

Y

N

VOA Vials Free of Headspace?

Y

N

QC Deliverables (please circle one)

Level 2

Level 3

Level 4

GLOBAL ID # SL184801463 / ERIL

Relinquished by:

Date

Time

Received by:

Date

Time

10/10/13

10:41

Cardno Fringe

10/10/13

10:41

Relinquished by:

Date

Time

Received by (Lab personnel):

Date

Time

10/11/13

15:10

Marla Madden

10/11/13

15:10

Alex Fuentes

Date

Time

Received by (Lab personnel):

Date

Time

10/14/13

17:00

Marla Madden

10/15/13

17:15

Alex Fuentes

Date

Time

Received by (Lab personnel):

Date

Time

10/14/13

17:00

Marla Madden

10/15/13

17:15

Alex Fuentes

Login Sample Receipt Checklist

Client: Cardno ERI

Job Number: 490-37786-1

SDG Number: 08115513

Login Number: 37786

List Source: TestAmerica Nashville

List Number: 1

Creator: Huskey, Adam

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

TestAmerica

THE LEADER IN ENVIRONMENTAL TESTING

ANALYTICAL REPORT

TestAmerica Laboratories, Inc.

TestAmerica Nashville

2960 Foster Creighton Drive
Nashville, TN 37204

Tel: (615)726-0177

TestAmerica Job ID: 490-37792-1

TestAmerica Sample Delivery Group: 08115513

Client Project/Site: Cardno - Jalk Fee

For:

Cardno ERI
4572 Telephone Road #916
Ventura, California 93003

Attn: Mr. James Anderson



Authorized for release by:

10/22/2013 1:05:32 PM

Leah Klingensmith, Senior Project Manager
(615)726-0177

leah.klingensmith@testamericainc.com

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Expert

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www.testamericainc.com

The test results in this report meet all 2003 NELAC and 2009 TNI requirements for accredited parameters, exceptions are noted in this report. This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

This report has been electronically signed and authorized by the signatory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Results relate only to the items tested and the sample(s) as received by the laboratory.

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Sample Summary

Client: Cardno ERI

Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1

SDG: 08115513

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
490-37792-1	W-93-MMW-04	Ground Water	10/10/13 02:36	10/15/13 08:15
490-37792-2	W-94-MMW-05	Ground Water	10/09/13 23:21	10/15/13 08:15
490-37792-3	W-95-MW6A	Ground Water	10/09/13 21:28	10/15/13 08:15
490-37792-4	W-94-MW6B	Ground Water	10/09/13 22:06	10/15/13 08:15
490-37792-5	W-94-MW6C	Ground Water	10/09/13 22:36	10/15/13 08:15
490-37792-6	W-95-MW9A	Ground Water	10/10/13 00:04	10/15/13 08:15
490-37792-7	W-93-MW9B	Ground Water	10/10/13 00:53	10/15/13 08:15
490-37792-8	W-99-MW9C	Ground Water	10/10/13 01:59	10/15/13 08:15
490-37792-9	QCTB	Water	10/09/13 06:00	10/15/13 08:15
490-37792-10	dup	Ground Water	10/09/13 00:01	10/15/13 08:15

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TestAmerica Nashville

Case Narrative

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
SDG: 08115513

Job ID: 490-37792-1

Laboratory: TestAmerica Nashville

Narrative

Job Narrative 490-37792-1

Comments

No additional comments.

Receipt

The samples were received on 10/15/2013 8:15 AM; the samples arrived in good condition, properly preserved and, where required, on ice. The temperature of the cooler at receipt was 3.5° C.

GC/MS VOA

Method(s) 8260B: The %RPD of the laboratory control sample (LCS) and laboratory control standard duplicate (LCSD) for preparation batch 115356 recovered outside control limits for the following analytes: dichlorodifluoromethane, trans-1,2-dichloroethene, trichlorofluoromethane, and vinyl chloride.

Method(s) 8260B: The matrix spike / matrix spike duplicate (MS/MSD) recoveries for batch 115823 were outside control limits for hexachlorobutadiene. The associated laboratory control sample (LCS) recovery met acceptance criteria.

No other analytical or quality issues were noted.

GC VOA

Method(s) 8015B GRO LL: Insufficient sample volume was available to perform batch matrix spike/matrix spike duplicate (MS/MSD) associated with batch 114647. The laboratory control sample (LCS) was performed in duplicate to provide precision data for this batch.

No other analytical or quality issues were noted.

GC Semi VOA

Method(s) 8015B: Insufficient sample volume was available to perform a matrix spike/matrix spike duplicate (MS/MSD) associated with batch 114790.

Method(s) 8015B: The method blank for batch 114790 contained C10-C28 above the method detection limit. This target analyte concentration was less than the reporting limit (RL); therefore, re-extraction and/or re-analysis of samples was not performed.

No other analytical or quality issues were noted.

Organic Prep

No analytical or quality issues were noted.

VOA Prep

No analytical or quality issues were noted.

Definitions/Glossary

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
SDG: 08115513

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.
*	RPD of the LCS and LCSD exceeds the control limits
F	MS/MSD Recovery and/or RPD exceeds the control limits

GC Semi VOA

Qualifier	Qualifier Description
B	Compound was found in the blank and sample.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

Glossary

Abbreviation

These commonly used abbreviations may or may not be present in this report.

□	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CNF	Contains no Free Liquid
DER	Duplicate error ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision level concentration
MDA	Minimum detectable activity
EDL	Estimated Detection Limit
MDC	Minimum detectable concentration
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
NC	Not Calculated
ND	Not detected at the reporting limit (or MDL or EDL if shown)
PQL	Practical Quantitation Limit
QC	Quality Control
RER	Relative error ratio
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Client Sample ID: W-93-MMW-04

Date Collected: 10/10/13 02:36
 Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-1
 Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.200	ug/L			10/18/13 18:40	1
Toluene	<0.500		0.500	0.170	ug/L			10/18/13 18:40	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/18/13 18:40	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/18/13 18:40	1
Methyl tert-butyl ether	<0.500		0.500	0.170	ug/L			10/18/13 18:40	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/18/13 18:40	1
1,1,1-Trichloroethane	0.333	J	0.500	0.190	ug/L			10/18/13 18:40	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/18/13 18:40	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/18/13 18:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	14.4		1.00	0.330	ug/L			10/18/13 18:40	1
1,1-Dichloroethane	15.7		0.500	0.240	ug/L			10/18/13 18:40	1
1,1-Dichloroethene	63.4		0.500	0.250	ug/L			10/18/13 18:40	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/18/13 18:40	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/18/13 18:40	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/18/13 18:40	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/18/13 18:40	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 18:40	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 18:40	1
cis-1,2-Dichloroethene	35.3		0.500	0.210	ug/L			10/18/13 18:40	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/18/13 18:40	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/18/13 18:40	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/18/13 18:40	1
1,2-Dichloroethane	1.96		0.500	0.200	ug/L			10/18/13 18:40	1
1,2-Dichloropropane	1.54		0.500	0.250	ug/L			10/18/13 18:40	1
trans-1,2-Dichloroethene	0.319	J *	0.500	0.230	ug/L			10/18/13 18:40	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 18:40	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 18:40	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/18/13 18:40	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 18:40	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/18/13 18:40	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/18/13 18:40	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/18/13 18:40	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/18/13 18:40	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/18/13 18:40	1
Acetone	<5.00		5.00	2.66	ug/L			10/18/13 18:40	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/18/13 18:40	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/18/13 18:40	1
Bromoform	<0.500		0.500	0.290	ug/L			10/18/13 18:40	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/18/13 18:40	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/18/13 18:40	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/18/13 18:40	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 18:40	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/18/13 18:40	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/18/13 18:40	1
Chloroform	4.82		0.500	0.230	ug/L			10/18/13 18:40	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/18/13 18:40	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/18/13 18:40	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/18/13 18:40	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Client Sample ID: W-93-MMW-04
Date Collected: 10/10/13 02:36
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-1
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.500	*	0.500	0.170	ug/L			10/18/13 18:40	1
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/18/13 18:40	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/18/13 18:40	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/18/13 18:40	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/18/13 18:40	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/18/13 18:40	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/18/13 18:40	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/18/13 18:40	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 18:40	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/18/13 18:40	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 18:40	1
Styrene	<0.500		0.500	0.280	ug/L			10/18/13 18:40	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 18:40	1
Tetrachloroethene	96.6		0.500	0.140	ug/L			10/18/13 18:40	1
Trichloroethene	65.0		0.500	0.200	ug/L			10/18/13 18:40	1
Trichlorofluoromethane	6.50 *		0.500	0.210	ug/L			10/18/13 18:40	1
Vinyl chloride	<0.500	*	0.500	0.180	ug/L			10/18/13 18:40	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		70 - 130		10/18/13 18:40	1
4-Bromofluorobenzene (Surr)	100		70 - 130		10/18/13 18:40	1
Dibromofluoromethane (Surr)	103		70 - 130		10/18/13 18:40	1
Toluene-d8 (Surr)	111		70 - 130		10/18/13 18:40	1

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-C12	104		50.0	38.0	ug/L			10/16/13 16:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>a,a,a-Trifluorotoluene</i>	108		50 - 150					10/16/13 16:44	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	161	J B	490	39.2	ug/L		10/16/13 12:18	10/17/13 17:35	1
ORO C24-C40	<490		490	39.2	ug/L		10/16/13 12:18	10/17/13 17:35	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	93		50 - 150				10/16/13 12:18	10/17/13 17:35	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Client Sample ID: W-94-MMW-05

Date Collected: 10/09/13 23:21
 Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-2
 Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.200	ug/L			10/18/13 19:07	1
Toluene	<0.500		0.500	0.170	ug/L			10/18/13 19:07	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/18/13 19:07	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/18/13 19:07	1
Methyl tert-butyl ether	0.301	J	0.500	0.170	ug/L			10/18/13 19:07	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/18/13 19:07	1
1,1,1-Trichloroethane	0.256	J	0.500	0.190	ug/L			10/18/13 19:07	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/18/13 19:07	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/18/13 19:07	1
1,1,2-Trichloro-1,2,2-trifluoroethane	45.6		1.00	0.330	ug/L			10/18/13 19:07	1
1,1-Dichloroethane	15.7		0.500	0.240	ug/L			10/18/13 19:07	1
1,1-Dichloroethene	92.7		0.500	0.250	ug/L			10/18/13 19:07	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/18/13 19:07	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/18/13 19:07	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/18/13 19:07	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/18/13 19:07	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 19:07	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 19:07	1
cis-1,2-Dichloroethene	36.9		0.500	0.210	ug/L			10/18/13 19:07	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/18/13 19:07	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/18/13 19:07	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/18/13 19:07	1
1,2-Dichloroethane	2.91		0.500	0.200	ug/L			10/18/13 19:07	1
1,2-Dichloropropane	0.439	J	0.500	0.250	ug/L			10/18/13 19:07	1
trans-1,2-Dichloroethene	0.408	J *	0.500	0.230	ug/L			10/18/13 19:07	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 19:07	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 19:07	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/18/13 19:07	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 19:07	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/18/13 19:07	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/18/13 19:07	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/18/13 19:07	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/18/13 19:07	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/18/13 19:07	1
Acetone	<5.00		5.00	2.66	ug/L			10/18/13 19:07	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/18/13 19:07	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/18/13 19:07	1
Bromoform	<0.500		0.500	0.290	ug/L			10/18/13 19:07	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/18/13 19:07	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/18/13 19:07	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/18/13 19:07	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 19:07	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/18/13 19:07	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/18/13 19:07	1
Chloroform	8.42		0.500	0.230	ug/L			10/18/13 19:07	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/18/13 19:07	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/18/13 19:07	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/18/13 19:07	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
SDG: 08115513

Client Sample ID: W-94-MMW-05

Date Collected: 10/09/13 23:21
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-2
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.500	*	0.500	0.170	ug/L			10/18/13 19:07	1
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/18/13 19:07	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/18/13 19:07	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/18/13 19:07	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/18/13 19:07	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/18/13 19:07	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/18/13 19:07	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/18/13 19:07	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 19:07	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/18/13 19:07	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 19:07	1
Styrene	<0.500		0.500	0.280	ug/L			10/18/13 19:07	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 19:07	1
Tetrachloroethene	169		0.500	0.140	ug/L			10/18/13 19:07	1
Trichloroethene	118		0.500	0.200	ug/L			10/18/13 19:07	1
Trichlorofluoromethane	17.6 *		0.500	0.210	ug/L			10/18/13 19:07	1
Vinyl chloride	<0.500 *		0.500	0.180	ug/L			10/18/13 19:07	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 130		10/18/13 19:07	1
4-Bromofluorobenzene (Surr)	100		70 - 130		10/18/13 19:07	1
Dibromofluoromethane (Surr)	103		70 - 130		10/18/13 19:07	1
Toluene-d8 (Surr)	107		70 - 130		10/18/13 19:07	1

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-C12	159		50.0	38.0	ug/L			10/16/13 17:14	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	102		50 - 150					10/16/13 17:14	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	263	J B	490	39.2	ug/L		10/16/13 12:18	10/17/13 17:50	1
ORO C24-C40	70.1	J	490	39.2	ug/L		10/16/13 12:18	10/17/13 17:50	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	88		50 - 150				10/16/13 12:18	10/17/13 17:50	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Client Sample ID: W-95-MW6A

Date Collected: 10/09/13 21:28

Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-3

Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.200	ug/L			10/18/13 19:33	1
Toluene	<0.500		0.500	0.170	ug/L			10/18/13 19:33	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/18/13 19:33	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/18/13 19:33	1
Methyl tert-butyl ether	0.329	J	0.500	0.170	ug/L			10/18/13 19:33	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/18/13 19:33	1
1,1,1-Trichloroethane	0.357	J	0.500	0.190	ug/L			10/18/13 19:33	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/18/13 19:33	1
1,1,2-Trichloroethane	0.219	J	0.500	0.190	ug/L			10/18/13 19:33	1
1,1,2-Trichloro-1,2,2-trifluoroethane	38.2		1.00	0.330	ug/L			10/18/13 19:33	1
1,1-Dichloroethane	23.0		0.500	0.240	ug/L			10/18/13 19:33	1
1,1-Dichloroethene	119		0.500	0.250	ug/L			10/18/13 19:33	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/18/13 19:33	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/18/13 19:33	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/18/13 19:33	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/18/13 19:33	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 19:33	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 19:33	1
cis-1,2-Dichloroethene	51.8		0.500	0.210	ug/L			10/18/13 19:33	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/18/13 19:33	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/18/13 19:33	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/18/13 19:33	1
1,2-Dichloroethane	4.17		0.500	0.200	ug/L			10/18/13 19:33	1
1,2-Dichloropropane	0.410	J	0.500	0.250	ug/L			10/18/13 19:33	1
trans-1,2-Dichloroethene	0.500	*	0.500	0.230	ug/L			10/18/13 19:33	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 19:33	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 19:33	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/18/13 19:33	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 19:33	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/18/13 19:33	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/18/13 19:33	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/18/13 19:33	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/18/13 19:33	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/18/13 19:33	1
Acetone	12.3		5.00	2.66	ug/L			10/18/13 19:33	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/18/13 19:33	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/18/13 19:33	1
Bromoform	<0.500		0.500	0.290	ug/L			10/18/13 19:33	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/18/13 19:33	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/18/13 19:33	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/18/13 19:33	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 19:33	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/18/13 19:33	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/18/13 19:33	1
Chloroform	9.59		0.500	0.230	ug/L			10/18/13 19:33	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/18/13 19:33	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/18/13 19:33	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/18/13 19:33	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
SDG: 08115513

Client Sample ID: W-95-MW6A
Date Collected: 10/09/13 21:28
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-3
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.500	*	0.500	0.170	ug/L			10/18/13 19:33	1
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/18/13 19:33	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/18/13 19:33	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/18/13 19:33	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/18/13 19:33	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/18/13 19:33	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/18/13 19:33	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/18/13 19:33	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 19:33	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/18/13 19:33	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 19:33	1
Styrene	<0.500		0.500	0.280	ug/L			10/18/13 19:33	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 19:33	1
Tetrachloroethene	188		0.500	0.140	ug/L			10/18/13 19:33	1
Trichloroethene	123		0.500	0.200	ug/L			10/18/13 19:33	1
Trichlorofluoromethane	16.4 *		0.500	0.210	ug/L			10/18/13 19:33	1
Vinyl chloride	<0.500 *		0.500	0.180	ug/L			10/18/13 19:33	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	111		70 - 130					10/18/13 19:33	1
4-Bromofluorobenzene (Surr)	99		70 - 130					10/18/13 19:33	1
Dibromofluoromethane (Surr)	101		70 - 130					10/18/13 19:33	1
Toluene-d8 (Surr)	110		70 - 130					10/18/13 19:33	1

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-C12	200		50.0	38.0	ug/L			10/16/13 17:44	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		50 - 150					10/16/13 17:44	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	695	B	490	39.2	ug/L		10/16/13 12:18	10/17/13 18:06	1
ORO C24-C40	297	J	490	39.2	ug/L		10/16/13 12:18	10/17/13 18:06	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	78		50 - 150				10/16/13 12:18	10/17/13 18:06	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Client Sample ID: W-94-MW6B

Date Collected: 10/09/13 22:06

Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-4

Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.369	J	0.500	0.200	ug/L			10/18/13 20:00	1
Toluene	<0.500		0.500	0.170	ug/L			10/18/13 20:00	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/18/13 20:00	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/18/13 20:00	1
Methyl tert-butyl ether	0.210	J	0.500	0.170	ug/L			10/18/13 20:00	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/18/13 20:00	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/18/13 20:00	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/18/13 20:00	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/18/13 20:00	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.84		1.00	0.330	ug/L			10/18/13 20:00	1
1,1-Dichloroethane	20.3		0.500	0.240	ug/L			10/18/13 20:00	1
1,1-Dichloroethene	73.8		0.500	0.250	ug/L			10/18/13 20:00	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/18/13 20:00	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/18/13 20:00	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/18/13 20:00	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/18/13 20:00	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 20:00	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 20:00	1
cis-1,2-Dichloroethene	355		5.00	2.10	ug/L			10/21/13 18:47	10
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/18/13 20:00	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/18/13 20:00	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/18/13 20:00	1
1,2-Dichloroethane	4.96		0.500	0.200	ug/L			10/18/13 20:00	1
1,2-Dichloropropane	0.255	J	0.500	0.250	ug/L			10/18/13 20:00	1
trans-1,2-Dichloroethene	2.42	*	0.500	0.230	ug/L			10/18/13 20:00	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 20:00	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 20:00	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/18/13 20:00	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 20:00	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/18/13 20:00	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/18/13 20:00	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/18/13 20:00	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/18/13 20:00	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/18/13 20:00	1
Acetone	<5.00		5.00	2.66	ug/L			10/18/13 20:00	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/18/13 20:00	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/18/13 20:00	1
Bromoform	<0.500		0.500	0.290	ug/L			10/18/13 20:00	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/18/13 20:00	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/18/13 20:00	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/18/13 20:00	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 20:00	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/18/13 20:00	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/18/13 20:00	1
Chloroform	0.519		0.500	0.230	ug/L			10/18/13 20:00	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/18/13 20:00	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/18/13 20:00	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/18/13 20:00	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
SDG: 08115513

Client Sample ID: W-94-MW6B
Date Collected: 10/09/13 22:06
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-4
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.500	*	0.500	0.170	ug/L			10/18/13 20:00	1
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/18/13 20:00	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/18/13 20:00	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/18/13 20:00	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/18/13 20:00	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/18/13 20:00	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/18/13 20:00	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/18/13 20:00	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 20:00	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/18/13 20:00	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 20:00	1
Styrene	<0.500		0.500	0.280	ug/L			10/18/13 20:00	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 20:00	1
Tetrachloroethene	641		5.00	1.40	ug/L			10/21/13 18:47	10
Trichloroethene	167		0.500	0.200	ug/L			10/18/13 20:00	1
Trichlorofluoromethane	0.357	J *	0.500	0.210	ug/L			10/18/13 20:00	1
Vinyl chloride	13.4	*	0.500	0.180	ug/L			10/18/13 20:00	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		70 - 130		10/18/13 20:00	1
1,2-Dichloroethane-d4 (Surr)	111		70 - 130		10/21/13 18:47	10
4-Bromofluorobenzene (Surr)	101		70 - 130		10/18/13 20:00	1
4-Bromofluorobenzene (Surr)	98		70 - 130		10/21/13 18:47	10
Dibromofluoromethane (Surr)	106		70 - 130		10/18/13 20:00	1
Dibromofluoromethane (Surr)	108		70 - 130		10/21/13 18:47	10
Toluene-d8 (Surr)	109		70 - 130		10/18/13 20:00	1
Toluene-d8 (Surr)	97		70 - 130		10/21/13 18:47	10

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-C12	525		50.0	38.0	ug/L			10/16/13 18:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	105		50 - 150					10/16/13 18:15	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	1650	B	490	39.2	ug/L		10/16/13 12:18	10/17/13 18:22	1	
ORO C24-C40	731		490	39.2	ug/L		10/16/13 12:18	10/17/13 18:22	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
o-Terphenyl (Surr)	78		50 - 150					10/16/13 12:18	10/17/13 18:22	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Client Sample ID: W-94-MW6C

Date Collected: 10/09/13 22:36
 Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-5
 Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.213	J	0.500	0.200	ug/L			10/18/13 20:27	1
Toluene	<0.500		0.500	0.170	ug/L			10/18/13 20:27	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/18/13 20:27	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/18/13 20:27	1
Methyl tert-butyl ether	<0.500		0.500	0.170	ug/L			10/18/13 20:27	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/18/13 20:27	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/18/13 20:27	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/18/13 20:27	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/18/13 20:27	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.389	J	1.00	0.330	ug/L			10/18/13 20:27	1
1,1-Dichloroethane	11.3		0.500	0.240	ug/L			10/18/13 20:27	1
1,1-Dichloroethene	39.3		0.500	0.250	ug/L			10/18/13 20:27	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/18/13 20:27	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/18/13 20:27	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/18/13 20:27	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/18/13 20:27	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 20:27	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 20:27	1
cis-1,2-Dichloroethene	70.1		0.500	0.210	ug/L			10/18/13 20:27	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/18/13 20:27	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/18/13 20:27	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/18/13 20:27	1
1,2-Dichloroethane	2.66		0.500	0.200	ug/L			10/18/13 20:27	1
1,2-Dichloropropane	0.382	J	0.500	0.250	ug/L			10/18/13 20:27	1
trans-1,2-Dichloroethene	1.97 *		0.500	0.230	ug/L			10/18/13 20:27	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 20:27	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 20:27	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/18/13 20:27	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 20:27	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/18/13 20:27	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/18/13 20:27	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/18/13 20:27	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/18/13 20:27	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/18/13 20:27	1
Acetone	<5.00		5.00	2.66	ug/L			10/18/13 20:27	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/18/13 20:27	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/18/13 20:27	1
Bromoform	<0.500		0.500	0.290	ug/L			10/18/13 20:27	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/18/13 20:27	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/18/13 20:27	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/18/13 20:27	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 20:27	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/18/13 20:27	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/18/13 20:27	1
Chloroform	<0.500		0.500	0.230	ug/L			10/18/13 20:27	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/18/13 20:27	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/18/13 20:27	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/18/13 20:27	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Client Sample ID: W-94-MW6C
Date Collected: 10/09/13 22:36
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-5
Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.500	*	0.500	0.170	ug/L			10/18/13 20:27	1
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/18/13 20:27	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/18/13 20:27	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/18/13 20:27	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/18/13 20:27	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/18/13 20:27	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/18/13 20:27	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/18/13 20:27	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 20:27	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/18/13 20:27	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 20:27	1
Styrene	<0.500		0.500	0.280	ug/L			10/18/13 20:27	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 20:27	1
Tetrachloroethene	359		2.50	0.700	ug/L			10/21/13 19:14	5
Trichloroethene	68.3		0.500	0.200	ug/L			10/18/13 20:27	1
Trichlorofluoromethane	<0.500	*	0.500	0.210	ug/L			10/18/13 20:27	1
Vinyl chloride	8.01	*	0.500	0.180	ug/L			10/18/13 20:27	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	112		70 - 130					10/18/13 20:27	1
1,2-Dichloroethane-d4 (Surr)	112		70 - 130					10/21/13 19:14	5
4-Bromofluorobenzene (Surr)	103		70 - 130					10/18/13 20:27	1
4-Bromofluorobenzene (Surr)	98		70 - 130					10/21/13 19:14	5
Dibromofluoromethane (Surr)	103		70 - 130					10/18/13 20:27	1
Dibromofluoromethane (Surr)	108		70 - 130					10/21/13 19:14	5
Toluene-d8 (Surr)	109		70 - 130					10/18/13 20:27	1
Toluene-d8 (Surr)	101		70 - 130					10/21/13 19:14	5

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-C12	198		50.0	38.0	ug/L			10/16/13 18:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	105		50 - 150					10/16/13 18:45	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	1250	B	490	39.2	ug/L		10/16/13 12:18	10/17/13 18:37	1
ORO C24-C40	637		490	39.2	ug/L		10/16/13 12:18	10/17/13 18:37	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	77		50 - 150				10/16/13 12:18	10/17/13 18:37	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Client Sample ID: W-95-MW9A

Date Collected: 10/10/13 00:04
 Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-6
 Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.200	ug/L			10/18/13 20:54	1
Toluene	<0.500		0.500	0.170	ug/L			10/18/13 20:54	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/18/13 20:54	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/18/13 20:54	1
Methyl tert-butyl ether	1.24		0.500	0.170	ug/L			10/18/13 20:54	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/18/13 20:54	1
1,1,1-Trichloroethane	0.423 J		0.500	0.190	ug/L			10/18/13 20:54	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/18/13 20:54	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/18/13 20:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	27.2		1.00	0.330	ug/L			10/18/13 20:54	1
1,1-Dichloroethane	19.8		0.500	0.240	ug/L			10/18/13 20:54	1
1,1-Dichloroethene	76.5		0.500	0.250	ug/L			10/18/13 20:54	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/18/13 20:54	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/18/13 20:54	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/18/13 20:54	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/18/13 20:54	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 20:54	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 20:54	1
cis-1,2-Dichloroethene	42.6		0.500	0.210	ug/L			10/18/13 20:54	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/18/13 20:54	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/18/13 20:54	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/18/13 20:54	1
1,2-Dichloroethane	3.44		0.500	0.200	ug/L			10/18/13 20:54	1
1,2-Dichloropropane	0.468 J		0.500	0.250	ug/L			10/18/13 20:54	1
trans-1,2-Dichloroethene	0.308 J *		0.500	0.230	ug/L			10/18/13 20:54	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 20:54	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 20:54	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/18/13 20:54	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 20:54	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/18/13 20:54	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/18/13 20:54	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/18/13 20:54	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/18/13 20:54	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/18/13 20:54	1
Acetone	10.3		5.00	2.66	ug/L			10/18/13 20:54	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/18/13 20:54	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/18/13 20:54	1
Bromoform	<0.500		0.500	0.290	ug/L			10/18/13 20:54	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/18/13 20:54	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/18/13 20:54	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/18/13 20:54	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 20:54	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/18/13 20:54	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/18/13 20:54	1
Chloroform	7.59		0.500	0.230	ug/L			10/18/13 20:54	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/18/13 20:54	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/18/13 20:54	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/18/13 20:54	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Client Sample ID: W-95-MW9A

Lab Sample ID: 490-37792-6

Date Collected: 10/10/13 00:04
 Date Received: 10/15/13 08:15

Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.500	*	0.500	0.170	ug/L			10/18/13 20:54	1
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/18/13 20:54	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/18/13 20:54	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/18/13 20:54	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/18/13 20:54	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/18/13 20:54	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/18/13 20:54	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/18/13 20:54	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 20:54	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/18/13 20:54	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 20:54	1
Styrene	<0.500		0.500	0.280	ug/L			10/18/13 20:54	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 20:54	1
Tetrachloroethene	196		2.50	0.700	ug/L			10/21/13 19:41	5
Trichloroethene	93.3		0.500	0.200	ug/L			10/18/13 20:54	1
Trichlorofluoromethane	12.6 *		0.500	0.210	ug/L			10/18/13 20:54	1
Vinyl chloride	<0.500 *		0.500	0.180	ug/L			10/18/13 20:54	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	113		70 - 130					10/18/13 20:54	1
1,2-Dichloroethane-d4 (Surr)	111		70 - 130					10/21/13 19:41	5
4-Bromofluorobenzene (Surr)	99		70 - 130					10/18/13 20:54	1
4-Bromofluorobenzene (Surr)	96		70 - 130					10/21/13 19:41	5
Dibromofluoromethane (Surr)	102		70 - 130					10/18/13 20:54	1
Dibromofluoromethane (Surr)	106		70 - 130					10/21/13 19:41	5
Toluene-d8 (Surr)	106		70 - 130					10/18/13 20:54	1
Toluene-d8 (Surr)	100		70 - 130					10/21/13 19:41	5

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-C12	173		50.0	38.0	ug/L			10/16/13 19:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	101		50 - 150					10/16/13 19:15	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	189	J B	490	39.2	ug/L		10/16/13 12:18	10/17/13 18:52	1
ORO C24-C40	82.7	J	490	39.2	ug/L		10/16/13 12:18	10/17/13 18:52	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
<i>o-Terphenyl (Surr)</i>	87		50 - 150				10/16/13 12:18	10/17/13 18:52	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Client Sample ID: W-93-MW9B

Date Collected: 10/10/13 00:53
 Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-7
 Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.200	ug/L			10/18/13 21:20	1
Toluene	<0.500		0.500	0.170	ug/L			10/18/13 21:20	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/18/13 21:20	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/18/13 21:20	1
Methyl tert-butyl ether	0.199	J	0.500	0.170	ug/L			10/18/13 21:20	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/18/13 21:20	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/18/13 21:20	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/18/13 21:20	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/18/13 21:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	3.64		1.00	0.330	ug/L			10/18/13 21:20	1
1,1-Dichloroethane	21.5		0.500	0.240	ug/L			10/18/13 21:20	1
1,1-Dichloroethene	97.8		0.500	0.250	ug/L			10/18/13 21:20	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/18/13 21:20	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/18/13 21:20	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/18/13 21:20	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/18/13 21:20	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 21:20	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 21:20	1
cis-1,2-Dichloroethene	112		0.500	0.210	ug/L			10/18/13 21:20	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/18/13 21:20	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/18/13 21:20	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/18/13 21:20	1
1,2-Dichloroethane	5.23		0.500	0.200	ug/L			10/18/13 21:20	1
1,2-Dichloropropene	<0.500		0.500	0.250	ug/L			10/18/13 21:20	1
trans-1,2-Dichloroethene	0.690	*	0.500	0.230	ug/L			10/18/13 21:20	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 21:20	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 21:20	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/18/13 21:20	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 21:20	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/18/13 21:20	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/18/13 21:20	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/18/13 21:20	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/18/13 21:20	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/18/13 21:20	1
Acetone	<5.00		5.00	2.66	ug/L			10/18/13 21:20	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/18/13 21:20	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/18/13 21:20	1
Bromoform	<0.500		0.500	0.290	ug/L			10/18/13 21:20	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/18/13 21:20	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/18/13 21:20	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/18/13 21:20	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 21:20	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/18/13 21:20	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/18/13 21:20	1
Chloroform	0.734		0.500	0.230	ug/L			10/18/13 21:20	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/18/13 21:20	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/18/13 21:20	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/18/13 21:20	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Client Sample ID: W-93-MW9B

Lab Sample ID: 490-37792-7

Date Collected: 10/10/13 00:53
 Date Received: 10/15/13 08:15

Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.500	*	0.500	0.170	ug/L			10/18/13 21:20	1
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/18/13 21:20	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/18/13 21:20	1
2-Butanone (MEK)	7.59	J	50.0	2.64	ug/L			10/18/13 21:20	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/18/13 21:20	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/18/13 21:20	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/18/13 21:20	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/18/13 21:20	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 21:20	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/18/13 21:20	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 21:20	1
Styrene	<0.500		0.500	0.280	ug/L			10/18/13 21:20	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 21:20	1
Tetrachloroethene	94.4		0.500	0.140	ug/L			10/18/13 21:20	1
Trichloroethene	111		0.500	0.200	ug/L			10/18/13 21:20	1
Trichlorofluoromethane	0.501	*	0.500	0.210	ug/L			10/18/13 21:20	1
Vinyl chloride	1.71	*	0.500	0.180	ug/L			10/18/13 21:20	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 130					10/18/13 21:20	1
4-Bromofluorobenzene (Surr)	98		70 - 130					10/18/13 21:20	1
Dibromofluoromethane (Surr)	103		70 - 130					10/18/13 21:20	1
Toluene-d8 (Surr)	109		70 - 130					10/18/13 21:20	1

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-C12	163		50.0	38.0	ug/L			10/16/13 19:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	107		50 - 150					10/16/13 19:45	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	182	J B	490	39.2	ug/L		10/16/13 12:18	10/17/13 19:08	1
ORO C24-C40	59.0	J	490	39.2	ug/L		10/16/13 12:18	10/17/13 19:08	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	89		50 - 150				10/16/13 12:18	10/17/13 19:08	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Client Sample ID: W-99-MW9C

Date Collected: 10/10/13 01:59

Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-8

Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.200	ug/L			10/18/13 21:47	1
Toluene	<0.500		0.500	0.170	ug/L			10/18/13 21:47	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/18/13 21:47	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/18/13 21:47	1
Methyl tert-butyl ether	<0.500		0.500	0.170	ug/L			10/18/13 21:47	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/18/13 21:47	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/18/13 21:47	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/18/13 21:47	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/18/13 21:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.00		1.00	0.330	ug/L			10/18/13 21:47	1
1,1-Dichloroethane	8.50		0.500	0.240	ug/L			10/18/13 21:47	1
1,1-Dichloroethene	42.2		0.500	0.250	ug/L			10/18/13 21:47	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/18/13 21:47	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/18/13 21:47	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/18/13 21:47	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/18/13 21:47	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 21:47	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 21:47	1
cis-1,2-Dichloroethene	51.8		0.500	0.210	ug/L			10/18/13 21:47	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/18/13 21:47	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/18/13 21:47	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/18/13 21:47	1
1,2-Dichloroethane	1.94		0.500	0.200	ug/L			10/18/13 21:47	1
1,2-Dichloropropane	0.351 J		0.500	0.250	ug/L			10/18/13 21:47	1
trans-1,2-Dichloroethene	0.685 *		0.500	0.230	ug/L			10/18/13 21:47	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 21:47	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 21:47	1
1,3-Dichloropropene	<0.500		0.500	0.190	ug/L			10/18/13 21:47	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 21:47	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/18/13 21:47	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/18/13 21:47	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/18/13 21:47	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/18/13 21:47	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/18/13 21:47	1
Acetone	<5.00		5.00	2.66	ug/L			10/18/13 21:47	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/18/13 21:47	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/18/13 21:47	1
Bromoform	<0.500		0.500	0.290	ug/L			10/18/13 21:47	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/18/13 21:47	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/18/13 21:47	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/18/13 21:47	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 21:47	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/18/13 21:47	1
Chloroethane	0.402 J		0.500	0.360	ug/L			10/18/13 21:47	1
Chloroform	<0.500		0.500	0.230	ug/L			10/18/13 21:47	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/18/13 21:47	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/18/13 21:47	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/18/13 21:47	1
Dichlorodifluoromethane	<0.500 *		0.500	0.170	ug/L			10/18/13 21:47	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Client Sample ID: W-99-MW9C

Lab Sample ID: 490-37792-8

Date Collected: 10/10/13 01:59
 Date Received: 10/15/13 08:15

Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/18/13 21:47	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/18/13 21:47	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/18/13 21:47	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/18/13 21:47	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/18/13 21:47	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/18/13 21:47	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/18/13 21:47	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 21:47	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/18/13 21:47	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 21:47	1
Styrene	<0.500		0.500	0.280	ug/L			10/18/13 21:47	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 21:47	1
Tetrachloroethene	7.41		0.500	0.140	ug/L			10/18/13 21:47	1
Trichloroethene	2.26		0.500	0.200	ug/L			10/18/13 21:47	1
Trichlorofluoromethane	<0.500 *		0.500	0.210	ug/L			10/18/13 21:47	1
Vinyl chloride	20.2 *		0.500	0.180	ug/L			10/18/13 21:47	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	114		70 - 130		10/18/13 21:47	1
4-Bromofluorobenzene (Surr)	97		70 - 130		10/18/13 21:47	1
Dibromofluoromethane (Surr)	103		70 - 130		10/18/13 21:47	1
Toluene-d8 (Surr)	112		70 - 130		10/18/13 21:47	1

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-C12	51.2		50.0	38.0	ug/L			10/16/13 20:15	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	98		50 - 150					10/16/13 20:15	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Diesel Range Organics [C10-C28]	637	B	490	39.2	ug/L		10/16/13 12:18	10/17/13 16:48	1
ORO C24-C40	557		490	39.2	ug/L		10/16/13 12:18	10/17/13 16:48	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
o-Terphenyl (Surr)	110		50 - 150				10/16/13 12:18	10/17/13 16:48	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Client Sample ID: QCTB
Date Collected: 10/09/13 06:00
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	<0.500		0.500	0.200	ug/L			10/18/13 17:46	1
Toluene	<0.500		0.500	0.170	ug/L			10/18/13 17:46	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/18/13 17:46	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/18/13 17:46	1
Methyl tert-butyl ether	<0.500		0.500	0.170	ug/L			10/18/13 17:46	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/18/13 17:46	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/18/13 17:46	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/18/13 17:46	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/18/13 17:46	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.00		1.00	0.330	ug/L			10/18/13 17:46	1
1,1-Dichloroethane	<0.500		0.500	0.240	ug/L			10/18/13 17:46	1
1,1-Dichloroethene	<0.500		0.500	0.250	ug/L			10/18/13 17:46	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/18/13 17:46	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/18/13 17:46	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/18/13 17:46	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/18/13 17:46	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 17:46	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 17:46	1
cis-1,2-Dichloroethene	<0.500		0.500	0.210	ug/L			10/18/13 17:46	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/18/13 17:46	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/18/13 17:46	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/18/13 17:46	1
1,2-Dichloroethane	<0.500		0.500	0.200	ug/L			10/18/13 17:46	1
1,2-Dichloropropane	<0.500		0.500	0.250	ug/L			10/18/13 17:46	1
trans-1,2-Dichloroethene	<0.500 *		0.500	0.230	ug/L			10/18/13 17:46	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 17:46	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 17:46	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/18/13 17:46	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 17:46	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/18/13 17:46	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/18/13 17:46	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/18/13 17:46	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/18/13 17:46	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/18/13 17:46	1
Acetone	<5.00		5.00	2.66	ug/L			10/18/13 17:46	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/18/13 17:46	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/18/13 17:46	1
Bromoform	<0.500		0.500	0.290	ug/L			10/18/13 17:46	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/18/13 17:46	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/18/13 17:46	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/18/13 17:46	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 17:46	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/18/13 17:46	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/18/13 17:46	1
Chloroform	<0.500		0.500	0.230	ug/L			10/18/13 17:46	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/18/13 17:46	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/18/13 17:46	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/18/13 17:46	1
Dichlorodifluoromethane	<0.500 *		0.500	0.170	ug/L			10/18/13 17:46	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Client Sample ID: QCTB
Date Collected: 10/09/13 06:00
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-9
Matrix: Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/18/13 17:46	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/18/13 17:46	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/18/13 17:46	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/18/13 17:46	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/18/13 17:46	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/18/13 17:46	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/18/13 17:46	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 17:46	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/18/13 17:46	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 17:46	1
Styrene	<0.500		0.500	0.280	ug/L			10/18/13 17:46	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 17:46	1
Tetrachloroethene	<0.500		0.500	0.140	ug/L			10/18/13 17:46	1
Trichloroethene	<0.500		0.500	0.200	ug/L			10/18/13 17:46	1
Trichlorofluoromethane	<0.500 *		0.500	0.210	ug/L			10/18/13 17:46	1
Vinyl chloride	<0.500 *		0.500	0.180	ug/L			10/18/13 17:46	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	109		70 - 130					10/18/13 17:46	1
4-Bromofluorobenzene (Surr)	101		70 - 130					10/18/13 17:46	1
Dibromofluoromethane (Surr)	100		70 - 130					10/18/13 17:46	1
Toluene-d8 (Surr)	109		70 - 130					10/18/13 17:46	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Client Sample ID: dup

Date Collected: 10/09/13 00:01
 Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-10

Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Benzene	0.221	J	0.500	0.200	ug/L			10/18/13 22:14	1
Toluene	<0.500		0.500	0.170	ug/L			10/18/13 22:14	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/18/13 22:14	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/18/13 22:14	1
Methyl tert-butyl ether	<0.500		0.500	0.170	ug/L			10/18/13 22:14	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/18/13 22:14	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/18/13 22:14	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/18/13 22:14	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/18/13 22:14	1
1,1,2-Trichloro-1,2,2-trifluoroethane	0.351	J	1.00	0.330	ug/L			10/18/13 22:14	1
1,1-Dichloroethane	11.2		0.500	0.240	ug/L			10/18/13 22:14	1
1,1-Dichloroethene	38.0		0.500	0.250	ug/L			10/18/13 22:14	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/18/13 22:14	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/18/13 22:14	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/18/13 22:14	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/18/13 22:14	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 22:14	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 22:14	1
cis-1,2-Dichloroethene	67.8		0.500	0.210	ug/L			10/18/13 22:14	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/18/13 22:14	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/18/13 22:14	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/18/13 22:14	1
1,2-Dichloroethane	2.62		0.500	0.200	ug/L			10/18/13 22:14	1
1,2-Dichloropropane	0.367	J	0.500	0.250	ug/L			10/18/13 22:14	1
trans-1,2-Dichloroethene	1.96 *		0.500	0.230	ug/L			10/18/13 22:14	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 22:14	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 22:14	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/18/13 22:14	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 22:14	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/18/13 22:14	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/18/13 22:14	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/18/13 22:14	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/18/13 22:14	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/18/13 22:14	1
Acetone	<5.00		5.00	2.66	ug/L			10/18/13 22:14	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/18/13 22:14	1
Bromochloromethane	<0.500		0.500	0.150	ug/L			10/18/13 22:14	1
Bromoform	<0.500		0.500	0.290	ug/L			10/18/13 22:14	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/18/13 22:14	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/18/13 22:14	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/18/13 22:14	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 22:14	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/18/13 22:14	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/18/13 22:14	1
Chloroform	<0.500		0.500	0.230	ug/L			10/18/13 22:14	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/18/13 22:14	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/18/13 22:14	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/18/13 22:14	1

TestAmerica Nashville

Client Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Client Sample ID: dup

Date Collected: 10/09/13 00:01
 Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-10
 Matrix: Ground Water

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Dichlorodifluoromethane	<0.500	*	0.500	0.170	ug/L			10/18/13 22:14	1
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L			10/18/13 22:14	1
Isopropylbenzene	<1.00		1.00	0.330	ug/L			10/18/13 22:14	1
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L			10/18/13 22:14	1
Methylene Chloride	<5.00		5.00	0.220	ug/L			10/18/13 22:14	1
2-Hexanone	<5.00		5.00	1.28	ug/L			10/18/13 22:14	1
Naphthalene	<5.00		5.00	0.210	ug/L			10/18/13 22:14	1
n-Butylbenzene	<0.500		0.500	0.240	ug/L			10/18/13 22:14	1
n-Propylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 22:14	1
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L			10/18/13 22:14	1
sec-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 22:14	1
Styrene	<0.500		0.500	0.280	ug/L			10/18/13 22:14	1
tert-Butylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 22:14	1
Tetrachloroethene	316		2.50	0.700	ug/L			10/21/13 20:08	5
Trichloroethene	68.4		0.500	0.200	ug/L			10/18/13 22:14	1
Trichlorofluoromethane	<0.500	*	0.500	0.210	ug/L			10/18/13 22:14	1
Vinyl chloride	8.38	*	0.500	0.180	ug/L			10/18/13 22:14	1

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane-d4 (Surr)	116		70 - 130		10/18/13 22:14	1
1,2-Dichloroethane-d4 (Surr)	113		70 - 130		10/21/13 20:08	5
4-Bromofluorobenzene (Surr)	99		70 - 130		10/18/13 22:14	1
4-Bromofluorobenzene (Surr)	95		70 - 130		10/21/13 20:08	5
Dibromofluoromethane (Surr)	101		70 - 130		10/18/13 22:14	1
Dibromofluoromethane (Surr)	105		70 - 130		10/21/13 20:08	5
Toluene-d8 (Surr)	111		70 - 130		10/18/13 22:14	1
Toluene-d8 (Surr)	105		70 - 130		10/21/13 20:08	5

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
C4-C12	200		50.0	38.0	ug/L			10/16/13 20:45	1
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac
a,a,a-Trifluorotoluene	103		50 - 150					10/16/13 20:45	1

Method: 8015B - Diesel Range Organics (DRO) (GC)

Analyte	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac	
Diesel Range Organics [C10-C28]	1070	B	490	39.2	ug/L		10/16/13 12:18	10/17/13 19:39	1	
ORO C24-C40	550		490	39.2	ug/L		10/16/13 12:18	10/17/13 19:39	1	
Surrogate	%Recovery	Qualifier	Limits				Prepared	Analyzed	Dil Fac	
o-Terphenyl (Surr)	94		50 - 150					10/16/13 12:18	10/17/13 19:39	1

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS)

Lab Sample ID: MB 490-115356/7

Matrix: Water

Analysis Batch: 115356

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.500		0.500	0.200	ug/L			10/18/13 14:12	1
Toluene	<0.500		0.500	0.170	ug/L			10/18/13 14:12	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/18/13 14:12	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/18/13 14:12	1
Methyl tert-butyl ether	<0.500		0.500	0.170	ug/L			10/18/13 14:12	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/18/13 14:12	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/18/13 14:12	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/18/13 14:12	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/18/13 14:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.00		1.00	0.330	ug/L			10/18/13 14:12	1
1,1-Dichloroethane	<0.500		0.500	0.240	ug/L			10/18/13 14:12	1
1,1-Dichloroethene	<0.500		0.500	0.250	ug/L			10/18/13 14:12	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/18/13 14:12	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/18/13 14:12	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/18/13 14:12	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/18/13 14:12	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 14:12	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/18/13 14:12	1
cis-1,2-Dichloroethene	<0.500		0.500	0.210	ug/L			10/18/13 14:12	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/18/13 14:12	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/18/13 14:12	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/18/13 14:12	1
1,2-Dichloroethane	<0.500		0.500	0.200	ug/L			10/18/13 14:12	1
1,2-Dichloropropane	<0.500		0.500	0.250	ug/L			10/18/13 14:12	1
trans-1,2-Dichloroethene	<0.500		0.500	0.230	ug/L			10/18/13 14:12	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 14:12	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 14:12	1
1,3-Dichloropropane	<0.500		0.500	0.190	ug/L			10/18/13 14:12	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/18/13 14:12	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/18/13 14:12	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/18/13 14:12	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/18/13 14:12	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/18/13 14:12	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/18/13 14:12	1
Acetone	<5.00		5.00	2.66	ug/L			10/18/13 14:12	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/18/13 14:12	1
Bromo(chloromethane	<0.500		0.500	0.150	ug/L			10/18/13 14:12	1
Bromoform	<0.500		0.500	0.290	ug/L			10/18/13 14:12	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/18/13 14:12	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/18/13 14:12	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/18/13 14:12	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/18/13 14:12	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/18/13 14:12	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/18/13 14:12	1
Chloroform	<0.500		0.500	0.230	ug/L			10/18/13 14:12	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/18/13 14:12	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/18/13 14:12	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/18/13 14:12	1

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-115356/7

Matrix: Water

Analysis Batch: 115356

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB		MB		D	Prepared	Analyzed	Dil Fac	
	Result	Qualifier	PQL	MDL					
Dichlorodifluoromethane	<0.500		0.500	0.170	ug/L		10/18/13 14:12	1	
Hexachloro-1,3-butadiene	<1.00		1.00	0.380	ug/L		10/18/13 14:12	1	
Isopropylbenzene	<1.00		1.00	0.330	ug/L		10/18/13 14:12	1	
2-Butanone (MEK)	<50.0		50.0	2.64	ug/L		10/18/13 14:12	1	
Methylene Chloride	<5.00		5.00	0.220	ug/L		10/18/13 14:12	1	
2-Hexanone	<5.00		5.00	1.28	ug/L		10/18/13 14:12	1	
Naphthalene	<5.00		5.00	0.210	ug/L		10/18/13 14:12	1	
n-Butylbenzene	<0.500		0.500	0.240	ug/L		10/18/13 14:12	1	
n-Propylbenzene	<0.500		0.500	0.170	ug/L		10/18/13 14:12	1	
p-Isopropyltoluene	<0.500		0.500	0.170	ug/L		10/18/13 14:12	1	
sec-Butylbenzene	<0.500		0.500	0.170	ug/L		10/18/13 14:12	1	
Styrene	<0.500		0.500	0.280	ug/L		10/18/13 14:12	1	
tert-Butylbenzene	<0.500		0.500	0.170	ug/L		10/18/13 14:12	1	
Tetrachloroethene	<0.500		0.500	0.140	ug/L		10/18/13 14:12	1	
Trichloroethene	<0.500		0.500	0.200	ug/L		10/18/13 14:12	1	
Trichlorofluoromethane	<0.500		0.500	0.210	ug/L		10/18/13 14:12	1	
Vinyl chloride	<0.500		0.500	0.180	ug/L		10/18/13 14:12	1	
MB		MB							
Surrogate	%Recovery	Qualifier	Limits			Prepared	Analyzed	Dil Fac	
1,2-Dichloroethane-d4 (Surr)	111		70 - 130				10/18/13 14:12	1	
4-Bromofluorobenzene (Surr)	99		70 - 130				10/18/13 14:12	1	
Dibromofluoromethane (Surr)	103		70 - 130				10/18/13 14:12	1	
Toluene-d8 (Surr)	104		70 - 130				10/18/13 14:12	1	

Lab Sample ID: LCS 490-115356/3

Matrix: Water

Analysis Batch: 115356

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike		LCS		Unit	D	%Rec	Limits
	Added	Result	Qualifier	Unit				
Benzene	50.0	46.52		ug/L		93	80 - 121	
Toluene	50.0	48.05		ug/L		96	80 - 126	
Ethylbenzene	50.0	47.72		ug/L		95	80 - 130	
Xylenes, Total	100	94.59		ug/L		95	80 - 132	
Methyl tert-butyl ether	50.0	46.53		ug/L		93	72 - 133	
1,1,1,2-Tetrachloroethane	50.0	50.99		ug/L		102	74 - 135	
1,1,1-Trichloroethane	50.0	46.55		ug/L		93	78 - 135	
1,1,2,2-Tetrachloroethane	50.0	53.74		ug/L		107	69 - 131	
1,1,2-Trichloroethane	50.0	51.20		ug/L		102	80 - 124	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	41.86		ug/L		84	77 - 129	
1,1-Dichloroethane	50.0	44.67		ug/L		89	78 - 125	
1,1-Dichloroethene	50.0	42.50		ug/L		85	79 - 124	
1,1-Dichloropropene	50.0	45.63		ug/L		91	80 - 122	
1,2,3-Trichlorobenzene	50.0	49.47		ug/L		99	62 - 133	
1,2,3-Trichloropropane	50.0	51.46		ug/L		103	70 - 131	
1,2,4-Trichlorobenzene	50.0	51.55		ug/L		103	63 - 133	
1,2,4-Trimethylbenzene	50.0	49.56		ug/L		99	77 - 126	
1,3,5-Trimethylbenzene	50.0	48.77		ug/L		98	77 - 127	

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI

Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1

SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-115356/3

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Matrix: Water

Analysis Batch: 115356

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.
		Result	Qualifier				
cis-1,2-Dichloroethene	50.0	48.76		ug/L		98	76 - 125
1,2-Dibromo-3-Chloropropane	50.0	54.96		ug/L		110	54 - 125
1,2-Dibromoethane (EDB)	50.0	49.65		ug/L		99	80 - 129
1,2-Dichlorobenzene	50.0	49.63		ug/L		99	80 - 121
1,2-Dichloroethane	50.0	51.49		ug/L		103	77 - 121
1,2-Dichloropropane	50.0	48.36		ug/L		97	75 - 120
trans-1,2-Dichloroethene	50.0	44.14		ug/L		88	79 - 126
cis-1,3-Dichloropropene	50.0	50.88		ug/L		102	74 - 140
1,3-Dichlorobenzene	50.0	49.86		ug/L		100	80 - 122
1,3-Dichloropropane	50.0	51.43		ug/L		103	80 - 125
trans-1,3-Dichloropropene	50.0	52.46		ug/L		105	63 - 134
1,4-Dichlorobenzene	50.0	49.62		ug/L		99	80 - 120
2,2-Dichloropropane	50.0	44.38		ug/L		89	43 - 161
2-Chlorotoluene	50.0	47.26		ug/L		95	75 - 126
4-Chlorotoluene	50.0	49.54		ug/L		99	75 - 130
4-Methyl-2-pentanone (MIBK)	250	269.9		ug/L		108	60 - 137
Acetone	250	252.9		ug/L		101	54 - 145
Bromobenzene	50.0	49.04		ug/L		98	68 - 130
Bromochloromethane	50.0	49.54		ug/L		99	78 - 129
Bromoform	50.0	59.21		ug/L		118	46 - 145
Bromomethane	50.0	52.25		ug/L		105	41 - 150
Carbon disulfide	50.0	45.33		ug/L		91	77 - 126
Carbon tetrachloride	50.0	47.21		ug/L		94	64 - 147
Chlorobenzene	50.0	46.68		ug/L		93	80 - 120
Dibromochloromethane	50.0	53.36		ug/L		107	69 - 133
Chloroethane	50.0	45.80		ug/L		92	72 - 120
Chloroform	50.0	48.50		ug/L		97	73 - 129
Chloromethane	50.0	36.43		ug/L		73	12 - 150
Dibromomethane	50.0	50.26		ug/L		101	71 - 125
Dichlorobromomethane	50.0	51.53		ug/L		103	75 - 129
Dichlorodifluoromethane	50.0	42.30		ug/L		85	37 - 127
Hexachloro-1,3-butadiene	50.0	47.14		ug/L		94	49 - 146
Isopropylbenzene	50.0	47.85		ug/L		96	80 - 141
2-Butanone (MEK)	250	248.1		ug/L		99	62 - 133
Methylene Chloride	50.0	42.48		ug/L		85	79 - 123
2-Hexanone	250	273.9		ug/L		110	60 - 142
Naphthalene	50.0	49.63		ug/L		99	62 - 138
n-Butylbenzene	50.0	50.86		ug/L		102	68 - 132
n-Propylbenzene	50.0	48.88		ug/L		98	75 - 129
p-Isopropyltoluene	50.0	48.96		ug/L		98	75 - 128
sec-Butylbenzene	50.0	49.38		ug/L		99	76 - 128
Styrene	50.0	51.35		ug/L		103	80 - 127
tert-Butylbenzene	50.0	42.95		ug/L		86	76 - 126
Tetrachloroethene	50.0	45.26		ug/L		91	80 - 126
Trichloroethene	50.0	46.61		ug/L		93	80 - 123
Trichlorofluoromethane	50.0	44.99		ug/L		90	65 - 124
Vinyl chloride	50.0	38.95		ug/L		78	68 - 120

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-115356/3

Matrix: Water

Analysis Batch: 115356

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	107				70 - 130
4-Bromofluorobenzene (Surr)	100				70 - 130
Dibromofluoromethane (Surr)	103				70 - 130
Toluene-d8 (Surr)	105				70 - 130

Lab Sample ID: LCSD 490-115356/4

Matrix: Water

Analysis Batch: 115356

Analyte	Spike Added	LCS	LCS	Unit	D	%Rec	Limits	RPD	RPD Limit
		Result	Qualifier						
Benzene	50.0	52.57		ug/L		105	80 - 121	12	17
Toluene	50.0	54.91		ug/L		110	80 - 126	13	15
Ethylbenzene	50.0	54.50		ug/L		109	80 - 130	13	15
Xylenes, Total	100	109.6		ug/L		110	80 - 132	15	15
Methyl tert-butyl ether	50.0	47.87		ug/L		96	72 - 133	3	16
1,1,1,2-Tetrachloroethane	50.0	55.96		ug/L		112	74 - 135	9	16
1,1,1-Trichloroethane	50.0	53.33		ug/L		107	78 - 135	14	17
1,1,2,2-Tetrachloroethane	50.0	54.49		ug/L		109	69 - 131	1	20
1,1,2-Trichloroethane	50.0	51.81		ug/L		104	80 - 124	1	15
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	49.33		ug/L		99	77 - 129	16	18
1,1-Dichloroethane	50.0	51.39		ug/L		103	78 - 125	14	17
1,1-Dichloroethene	50.0	50.64		ug/L		101	79 - 124	17	17
1,1-Dichloropropene	50.0	53.26		ug/L		107	80 - 122	15	17
1,2,3-Trichlorobenzene	50.0	54.14		ug/L		108	62 - 133	9	25
1,2,3-Trichloropropane	50.0	50.69		ug/L		101	70 - 131	2	19
1,2,4-Trichlorobenzene	50.0	55.56		ug/L		111	63 - 133	7	19
1,2,4-Trimethylbenzene	50.0	55.11		ug/L		110	77 - 126	11	16
1,3,5-Trimethylbenzene	50.0	56.35		ug/L		113	77 - 127	14	17
cis-1,2-Dichloroethene	50.0	55.99		ug/L		112	76 - 125	14	17
1,2-Dibromo-3-Chloropropane	50.0	53.27		ug/L		107	54 - 125	3	24
1,2-Dibromoethane (EDB)	50.0	50.42		ug/L		101	80 - 129	2	15
1,2-Dichlorobenzene	50.0	53.36		ug/L		107	80 - 121	7	15
1,2-Dichloroethane	50.0	53.57		ug/L		107	77 - 121	4	17
1,2-Dichloropropane	50.0	52.03		ug/L		104	75 - 120	7	17
trans-1,2-Dichloroethene	50.0	52.14 *		ug/L		104	79 - 126	17	16
cis-1,3-Dichloropropene	50.0	53.95		ug/L		108	74 - 140	6	15
1,3-Dichlorobenzene	50.0	55.42		ug/L		111	80 - 122	11	15
1,3-Dichloropropane	50.0	53.75		ug/L		107	80 - 125	4	14
trans-1,3-Dichloropropene	50.0	54.95		ug/L		110	63 - 134	5	14
1,4-Dichlorobenzene	50.0	54.28		ug/L		109	80 - 120	9	15
2,2-Dichloropropane	50.0	50.90		ug/L		102	43 - 161	14	18
2-Chlorotoluene	50.0	54.27		ug/L		109	75 - 126	14	17
4-Chlorotoluene	50.0	56.81		ug/L		114	75 - 130	14	18
4-Methyl-2-pentanone (MIBK)	250	266.3		ug/L		107	60 - 137	1	17
Acetone	250	238.2		ug/L		95	54 - 145	6	21
Bromobenzene	50.0	53.49		ug/L		107	68 - 130	9	20
Bromochloromethane	50.0	53.14		ug/L		106	78 - 129	7	17

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-115356/4

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analysis Batch: 115356

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Added	Result	Qualifier						
Bromoform	50.0	61.26		ug/L		123	46 - 145	3	16
Bromomethane	50.0	59.37		ug/L		119	41 - 150	13	50
Carbon disulfide	50.0	52.71		ug/L		105	77 - 126	15	21
Carbon tetrachloride	50.0	54.63		ug/L		109	64 - 147	15	19
Chlorobenzene	50.0	52.09		ug/L		104	80 - 120	11	14
Dibromochloromethane	50.0	55.78		ug/L		112	69 - 133	4	15
Chloroethane	50.0	53.31		ug/L		107	72 - 120	15	20
Chloroform	50.0	53.71		ug/L		107	73 - 129	10	18
Chloromethane	50.0	43.50		ug/L		87	12 - 150	18	31
Dibromomethane	50.0	51.31		ug/L		103	71 - 125	2	16
Dichlorobromomethane	50.0	54.60		ug/L		109	75 - 129	6	18
Dichlorodifluoromethane	50.0	52.31 *		ug/L		105	37 - 127	21	18
Hexachloro-1,3-butadiene	50.0	56.22		ug/L		112	49 - 146	18	23
Isopropylbenzene	50.0	54.33		ug/L		109	80 - 141	13	16
2-Butanone (MEK)	250	242.9		ug/L		97	62 - 133	2	19
Methylene Chloride	50.0	47.67		ug/L		95	79 - 123	12	17
2-Hexanone	250	271.4		ug/L		109	60 - 142	1	15
Naphthalene	50.0	51.60		ug/L		103	62 - 138	4	26
n-Butylbenzene	50.0	59.45		ug/L		119	68 - 132	16	18
n-Propylbenzene	50.0	56.67		ug/L		113	75 - 129	15	17
p-Isopropyltoluene	50.0	56.30		ug/L		113	75 - 128	14	16
sec-Butylbenzene	50.0	56.95		ug/L		114	76 - 128	14	16
Styrene	50.0	58.25		ug/L		116	80 - 127	13	24
tert-Butylbenzene	50.0	48.21		ug/L		96	76 - 126	12	16
Tetrachloroethene	50.0	53.13		ug/L		106	80 - 126	16	16
Trichloroethene	50.0	51.93		ug/L		104	80 - 123	11	17
Trichlorofluoromethane	50.0	54.19 *		ug/L		108	65 - 124	19	18
Vinyl chloride	50.0	48.27 *		ug/L		97	68 - 120	21	17

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	104		70 - 130
4-Bromofluorobenzene (Surr)	98		70 - 130
Dibromofluoromethane (Surr)	101		70 - 130
Toluene-d8 (Surr)	103		70 - 130

Lab Sample ID: 490-37692-B-2 MS

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analysis Batch: 115356

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Benzene	<0.500		50.0	51.68		ug/L		103	75 - 133
Toluene	<0.500		50.0	56.88		ug/L		114	75 - 136
Ethylbenzene	<0.500		50.0	54.57		ug/L		109	79 - 139
Xylenes, Total	<1.50		100	108.2		ug/L		108	74 - 141
Methyl tert-butyl ether	<0.500		50.0	48.10		ug/L		96	66 - 141
1,1,1,2-Tetrachloroethane	<0.500		50.0	55.99		ug/L		112	73 - 141
1,1,1-Trichloroethane	<0.500		50.0	55.62		ug/L		111	76 - 149
1,1,2,2-Tetrachloroethane	<0.500		50.0	56.45		ug/L		113	56 - 143

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-37692-B-2 MS

Matrix: Water

Analysis Batch: 115356

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits	
	Result	Qualifier	Added	Result	Qualifier					
1,1,2-Trichloroethane	<0.500		50.0	55.94		ug/L		112	74 - 134	
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.00		50.0	49.92		ug/L		100	72 - 148	
1,1-Dichloroethane	<0.500		50.0	51.57		ug/L		103	71 - 139	
1,1-Dichloroethene	<0.500		50.0	48.98		ug/L		98	70 - 142	
1,1-Dichloropropene	<0.500		50.0	52.46		ug/L		105	76 - 139	
1,2,3-Trichlorobenzene	<0.500		50.0	53.31		ug/L		107	55 - 138	
1,2,3-Trichloropropane	<0.500		50.0	50.56		ug/L		101	53 - 144	
1,2,4-Trichlorobenzene	<0.500		50.0	55.92		ug/L		112	60 - 136	
1,2,4-Trimethylbenzene	<0.500		50.0	54.68		ug/L		109	69 - 136	
1,3,5-Trimethylbenzene	<0.500		50.0	56.08		ug/L		112	69 - 139	
cis-1,2-Dichloroethene	<0.500		50.0	54.00		ug/L		108	68 - 138	
1,2-Dibromo-3-Chloropropane	<5.00		50.0	51.42		ug/L		103	52 - 126	
1,2-Dibromoethane (EDB)	<0.500		50.0	50.41		ug/L		101	75 - 137	
1,2-Dichlorobenzene	<0.500		50.0	53.48		ug/L		107	79 - 128	
1,2-Dichloroethane	<0.500		50.0	55.59		ug/L		111	64 - 136	
1,2-Dichloropropane	<0.500		50.0	53.16		ug/L		106	67 - 131	
trans-1,2-Dichloroethene	<0.500 *		50.0	50.39		ug/L		101	66 - 143	
cis-1,3-Dichloropropene	<0.500		50.0	55.30		ug/L		111	71 - 141	
1,3-Dichlorobenzene	<0.500		50.0	55.50		ug/L		111	77 - 131	
1,3-Dichloropropane	<0.500		50.0	51.44		ug/L		103	72 - 134	
trans-1,3-Dichloropropene	<0.500		50.0	56.44		ug/L		113	59 - 135	
1,4-Dichlorobenzene	<0.500		50.0	53.64		ug/L		107	78 - 126	
2,2-Dichloropropane	<0.500		50.0	50.88		ug/L		102	37 - 175	
2-Chlorotoluene	<0.500		50.0	53.87		ug/L		108	67 - 138	
4-Chlorotoluene	<0.500		50.0	56.45		ug/L		113	69 - 138	
4-Methyl-2-pentanone (MIBK)	<5.00		250	289.2		ug/L		116	50 - 147	
Acetone	<5.00		250	272.6		ug/L		109	45 - 141	
Bromobenzene	<0.500		50.0	53.57		ug/L		107	60 - 138	
Bromochloromethane	<0.500		50.0	54.38		ug/L		109	67 - 139	
Bromoform	<0.500		50.0	60.41		ug/L		121	42 - 147	
Bromomethane	<0.500		50.0	46.94		ug/L		94	16 - 163	
Carbon disulfide	<0.500		50.0	43.45		ug/L		87	48 - 152	
Carbon tetrachloride	<0.500		50.0	56.94		ug/L		114	62 - 164	
Chlorobenzene	<0.500		50.0	52.24		ug/L		104	80 - 129	
Dibromochloromethane	<0.500		50.0	57.15		ug/L		114	66 - 140	
Chloroethane	<0.500		50.0	51.93		ug/L		104	58 - 137	
Chloroform	<0.500		50.0	56.00		ug/L		112	66 - 138	
Chloromethane	<0.500		50.0	40.15		ug/L		80	10 - 169	
Dibromomethane	<0.500		50.0	53.88		ug/L		108	58 - 140	
Dichlorobromomethane	<0.500		50.0	57.56		ug/L		115	70 - 140	
Dichlorodifluoromethane	<0.500 *		50.0	48.42		ug/L		97	40 - 127	
Hexachloro-1,3-butadiene	<1.00		50.0	56.90		ug/L		114	45 - 155	
Isopropylbenzene	<1.00		50.0	56.77		ug/L		114	80 - 153	
2-Butanone (MEK)	<50.0		250	254.1		ug/L		102	50 - 138	
Methylene Chloride	<5.00		50.0	46.41		ug/L		93	64 - 139	
2-Hexanone	<5.00		250	246.3		ug/L		99	50 - 150	
Naphthalene	<5.00		50.0	51.51		ug/L		103	55 - 140	

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-37692-B-2 MS

Matrix: Water

Analysis Batch: 115356

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier						
n-Butylbenzene	0.254	J	50.0	62.75		ug/L		125	66 - 141		
n-Propylbenzene	<0.500		50.0	56.94		ug/L		114	69 - 142		
p-Isopropyltoluene	<0.500		50.0	56.95		ug/L		114	71 - 137		
sec-Butylbenzene	1.21		50.0	59.57		ug/L		117	73 - 138		
Styrene	<0.500		50.0	58.56		ug/L		117	61 - 148		
tert-Butylbenzene	<0.500		50.0	49.06		ug/L		98	70 - 138		
Tetrachloroethene	<0.500		50.0	54.60		ug/L		109	72 - 145		
Trichloroethene	<0.500		50.0	51.23		ug/L		102	73 - 144		
Trichlorofluoromethane	<0.500 *		50.0	55.40		ug/L		111	58 - 139		
Vinyl chloride	<0.500 *		50.0	45.38		ug/L		91	56 - 129		
<hr/>											
Surrogate											
	MS	MS									
	%Recovery	Qualifier				Limits					
1,2-Dichloroethane-d4 (Surr)	110					70 - 130					
4-Bromofluorobenzene (Surr)	101					70 - 130					
Dibromofluoromethane (Surr)	105					70 - 130					
Toluene-d8 (Surr)	108					70 - 130					

Lab Sample ID: 490-37692-C-2 MSD

Matrix: Water

Analysis Batch: 115356

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Benzene	<0.500		50.0	51.05		ug/L		102	75 - 133	1	17
Toluene	<0.500		50.0	54.61		ug/L		109	75 - 136	4	15
Ethylbenzene	<0.500		50.0	53.54		ug/L		107	79 - 139	2	15
Xylenes, Total	<1.50		100	106.1		ug/L		106	74 - 141	2	15
Methyl tert-butyl ether	<0.500		50.0	50.10		ug/L		100	66 - 141	4	16
1,1,1,2-Tetrachloroethane	<0.500		50.0	55.55		ug/L		111	73 - 141	1	16
1,1,1-Trichloroethane	<0.500		50.0	54.96		ug/L		110	76 - 149	1	17
1,1,2,2-Tetrachloroethane	<0.500		50.0	54.82		ug/L		110	56 - 143	3	20
1,1,2-Trichloroethane	<0.500		50.0	55.58		ug/L		111	74 - 134	1	15
1,1,2-Trichloro-1,2,2-trifluoroetha ne	<1.00		50.0	51.15		ug/L		102	72 - 148	2	18
1,1-Dichloroethane	<0.500		50.0	51.32		ug/L		103	71 - 139	0	17
1,1-Dichloroethene	<0.500		50.0	49.72		ug/L		99	70 - 142	2	17
1,1-Dichloropropene	<0.500		50.0	52.49		ug/L		105	76 - 139	0	17
1,2,3-Trichlorobenzene	<0.500		50.0	53.51		ug/L		107	55 - 138	0	25
1,2,3-Trichloropropane	<0.500		50.0	51.29		ug/L		103	53 - 144	1	19
1,2,4-Trichlorobenzene	<0.500		50.0	57.45		ug/L		115	60 - 136	3	19
1,2,4-Trimethylbenzene	<0.500		50.0	54.17		ug/L		108	69 - 136	1	16
1,3,5-Trimethylbenzene	<0.500		50.0	54.76		ug/L		110	69 - 139	2	17
cis-1,2-Dichloroethene	<0.500		50.0	55.22		ug/L		110	68 - 138	2	17
1,2-Dibromo-3-Chloropropane	<5.00		50.0	53.52		ug/L		107	52 - 126	4	24
1,2-Dibromoethane (EDB)	<0.500		50.0	50.36		ug/L		101	75 - 137	0	15
1,2-Dichlorobenzene	<0.500		50.0	53.15		ug/L		106	79 - 128	1	15
1,2-Dichloroethane	<0.500		50.0	53.40		ug/L		107	64 - 136	4	17
1,2-Dichloropropene	<0.500		50.0	54.15		ug/L		108	67 - 131	2	17
trans-1,2-Dichloroethene	<0.500 *		50.0	50.81		ug/L		102	66 - 143	1	16

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI

Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1

SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-37692-C-2 MSD

Matrix: Water

Analysis Batch: 115356

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
cis-1,3-Dichloropropene	<0.500		50.0	55.19		ug/L	110	71 - 141		0	15	
1,3-Dichlorobenzene	<0.500		50.0	54.29		ug/L	109	77 - 131	2	15		
1,3-Dichloropropane	<0.500		50.0	51.11		ug/L	102	72 - 134	1	14		
trans-1,3-Dichloropropene	<0.500		50.0	55.49		ug/L	111	59 - 135	2	14		
1,4-Dichlorobenzene	<0.500		50.0	52.78		ug/L	106	78 - 126	2	15		
2,2-Dichloropropane	<0.500		50.0	50.54		ug/L	101	37 - 175	1	18		
2-Chlorotoluene	<0.500		50.0	53.00		ug/L	106	67 - 138	2	17		
4-Chlorotoluene	<0.500		50.0	55.26		ug/L	111	69 - 138	2	18		
4-Methyl-2-pentanone (MIBK)	<5.00		250	284.5		ug/L	114	50 - 147	2	17		
Acetone	<5.00		250	287.6		ug/L	115	45 - 141	5	21		
Bromobenzene	<0.500		50.0	52.09		ug/L	104	60 - 138	3	20		
Bromochloromethane	<0.500		50.0	54.38		ug/L	109	67 - 139	0	17		
Bromoform	<0.500		50.0	61.22		ug/L	122	42 - 147	1	16		
Bromomethane	<0.500		50.0	53.51		ug/L	107	16 - 163	13	50		
Carbon disulfide	<0.500		50.0	43.02		ug/L	86	48 - 152	1	21		
Carbon tetrachloride	<0.500		50.0	56.67		ug/L	113	62 - 164	0	19		
Chlorobenzene	<0.500		50.0	51.61		ug/L	103	80 - 129	1	14		
Dibromochloromethane	<0.500		50.0	56.28		ug/L	113	66 - 140	2	15		
Chloroethane	<0.500		50.0	50.47		ug/L	101	58 - 137	3	20		
Chloroform	<0.500		50.0	55.54		ug/L	111	66 - 138	1	18		
Chloromethane	<0.500		50.0	41.78		ug/L	84	10 - 169	4	31		
Dibromomethane	<0.500		50.0	53.30		ug/L	107	58 - 140	1	16		
Dichlorobromomethane	<0.500		50.0	56.97		ug/L	114	70 - 140	1	18		
Dichlorodifluoromethane	<0.500 *		50.0	47.86		ug/L	96	40 - 127	1	18		
Hexachloro-1,3-butadiene	<1.00		50.0	54.80		ug/L	110	45 - 155	4	23		
Isopropylbenzene	<1.00		50.0	54.48		ug/L	109	80 - 153	4	16		
2-Butanone (MEK)	<50.0		250	256.8		ug/L	103	50 - 138	1	19		
Methylene Chloride	<5.00		50.0	46.98		ug/L	94	64 - 139	1	17		
2-Hexanone	<5.00		250	248.7		ug/L	99	50 - 150	1	15		
Naphthalene	<5.00		50.0	54.50		ug/L	109	55 - 140	6	26		
n-Butylbenzene	0.254 J		50.0	60.19		ug/L	120	66 - 141	4	18		
n-Propylbenzene	<0.500		50.0	55.59		ug/L	111	69 - 142	2	17		
p-Isopropyltoluene	<0.500		50.0	55.65		ug/L	111	71 - 137	2	16		
sec-Butylbenzene	1.21		50.0	58.78		ug/L	115	73 - 138	1	16		
Styrene	<0.500		50.0	57.00		ug/L	114	61 - 148	3	24		
tert-Butylbenzene	<0.500		50.0	48.16		ug/L	96	70 - 138	2	16		
Tetrachloroethene	<0.500		50.0	52.75		ug/L	106	72 - 145	3	16		
Trichloroethene	<0.500		50.0	52.62		ug/L	105	73 - 144	3	17		
Trichlorofluoromethane	<0.500 *		50.0	55.20		ug/L	110	58 - 139	0	18		
Vinyl chloride	<0.500 *		50.0	46.11		ug/L	92	56 - 129	2	17		

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	110		70 - 130
4-Bromofluorobenzene (Surr)	100		70 - 130
Dibromofluoromethane (Surr)	106		70 - 130
Toluene-d8 (Surr)	105		70 - 130

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-115823/7

Matrix: Water

Analysis Batch: 115823

Client Sample ID: Method Blank

Prep Type: Total/NA

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Benzene	<0.500		0.500	0.200	ug/L			10/21/13 18:20	1
Toluene	<0.500		0.500	0.170	ug/L			10/21/13 18:20	1
Ethylbenzene	<0.500		0.500	0.190	ug/L			10/21/13 18:20	1
Xylenes, Total	<1.50		1.50	0.580	ug/L			10/21/13 18:20	1
Methyl tert-butyl ether	<0.500		0.500	0.170	ug/L			10/21/13 18:20	1
1,1,1,2-Tetrachloroethane	<0.500		0.500	0.150	ug/L			10/21/13 18:20	1
1,1,1-Trichloroethane	<0.500		0.500	0.190	ug/L			10/21/13 18:20	1
1,1,2,2-Tetrachloroethane	<0.500		0.500	0.190	ug/L			10/21/13 18:20	1
1,1,2-Trichloroethane	<0.500		0.500	0.190	ug/L			10/21/13 18:20	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.00		1.00	0.330	ug/L			10/21/13 18:20	1
1,1-Dichloroethane	<0.500		0.500	0.240	ug/L			10/21/13 18:20	1
1,1-Dichloroethene	<0.500		0.500	0.250	ug/L			10/21/13 18:20	1
1,1-Dichloropropene	<0.500		0.500	0.200	ug/L			10/21/13 18:20	1
1,2,3-Trichlorobenzene	<0.500		0.500	0.230	ug/L			10/21/13 18:20	1
1,2,3-Trichloropropane	<0.500		0.500	0.230	ug/L			10/21/13 18:20	1
1,2,4-Trichlorobenzene	<0.500		0.500	0.200	ug/L			10/21/13 18:20	1
1,2,4-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/21/13 18:20	1
1,3,5-Trimethylbenzene	<0.500		0.500	0.170	ug/L			10/21/13 18:20	1
cis-1,2-Dichloroethene	<0.500		0.500	0.210	ug/L			10/21/13 18:20	1
1,2-Dibromo-3-Chloropropane	<5.00		5.00	0.940	ug/L			10/21/13 18:20	1
1,2-Dibromoethane (EDB)	<0.500		0.500	0.210	ug/L			10/21/13 18:20	1
1,2-Dichlorobenzene	<0.500		0.500	0.190	ug/L			10/21/13 18:20	1
1,2-Dichloroethane	<0.500		0.500	0.200	ug/L			10/21/13 18:20	1
1,2-Dichloropropene	<0.500		0.500	0.250	ug/L			10/21/13 18:20	1
trans-1,2-Dichloroethene	<0.500		0.500	0.230	ug/L			10/21/13 18:20	1
cis-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/21/13 18:20	1
1,3-Dichlorobenzene	<0.500		0.500	0.180	ug/L			10/21/13 18:20	1
1,3-Dichloropropene	<0.500		0.500	0.190	ug/L			10/21/13 18:20	1
trans-1,3-Dichloropropene	<0.500		0.500	0.170	ug/L			10/21/13 18:20	1
1,4-Dichlorobenzene	<0.500		0.500	0.170	ug/L			10/21/13 18:20	1
2,2-Dichloropropane	<0.500		0.500	0.160	ug/L			10/21/13 18:20	1
2-Chlorotoluene	<0.500		0.500	0.180	ug/L			10/21/13 18:20	1
4-Chlorotoluene	<0.500		0.500	0.170	ug/L			10/21/13 18:20	1
4-Methyl-2-pentanone (MIBK)	<5.00		5.00	0.810	ug/L			10/21/13 18:20	1
Acetone	<5.00		5.00	2.66	ug/L			10/21/13 18:20	1
Bromobenzene	<0.500		0.500	0.210	ug/L			10/21/13 18:20	1
Bromo(chloromethane	<0.500		0.500	0.150	ug/L			10/21/13 18:20	1
Bromoform	<0.500		0.500	0.290	ug/L			10/21/13 18:20	1
Bromomethane	<0.500		0.500	0.350	ug/L			10/21/13 18:20	1
Carbon disulfide	<0.500		0.500	0.220	ug/L			10/21/13 18:20	1
Carbon tetrachloride	<0.500		0.500	0.180	ug/L			10/21/13 18:20	1
Chlorobenzene	<0.500		0.500	0.180	ug/L			10/21/13 18:20	1
Dibromochloromethane	<0.500		0.500	0.250	ug/L			10/21/13 18:20	1
Chloroethane	<0.500		0.500	0.360	ug/L			10/21/13 18:20	1
Chloroform	<0.500		0.500	0.230	ug/L			10/21/13 18:20	1
Chloromethane	<0.500		0.500	0.360	ug/L			10/21/13 18:20	1
Dibromomethane	<0.500		0.500	0.450	ug/L			10/21/13 18:20	1
Dichlorobromomethane	<0.500		0.500	0.170	ug/L			10/21/13 18:20	1

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: MB 490-115823/7

Matrix: Water

Analysis Batch: 115823

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	Result	Qualifier	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier									
Dichlorodifluoromethane	<0.500		0.500		0.170	ug/L				10/21/13 18:20	1
Hexachloro-1,3-butadiene	<1.00			1.00	0.380	ug/L				10/21/13 18:20	1
Isopropylbenzene	<1.00			1.00	0.330	ug/L				10/21/13 18:20	1
2-Butanone (MEK)	<50.0			50.0	2.64	ug/L				10/21/13 18:20	1
Methylene Chloride	<5.00			5.00	0.220	ug/L				10/21/13 18:20	1
2-Hexanone	<5.00			5.00	1.28	ug/L				10/21/13 18:20	1
Naphthalene	<5.00			5.00	0.210	ug/L				10/21/13 18:20	1
n-Butylbenzene	<0.500			0.500	0.240	ug/L				10/21/13 18:20	1
n-Propylbenzene	<0.500			0.500	0.170	ug/L				10/21/13 18:20	1
p-Isopropyltoluene	<0.500			0.500	0.170	ug/L				10/21/13 18:20	1
sec-Butylbenzene	<0.500			0.500	0.170	ug/L				10/21/13 18:20	1
Styrene	<0.500			0.500	0.280	ug/L				10/21/13 18:20	1
tert-Butylbenzene	<0.500			0.500	0.170	ug/L				10/21/13 18:20	1
Tetrachloroethene	<0.500			0.500	0.140	ug/L				10/21/13 18:20	1
Trichloroethene	<0.500			0.500	0.200	ug/L				10/21/13 18:20	1
Trichlorofluoromethane	<0.500			0.500	0.210	ug/L				10/21/13 18:20	1
Vinyl chloride	<0.500			0.500	0.180	ug/L				10/21/13 18:20	1
MB MB		MB MB		Surrogate		%Recovery		Qualifer		Limits	
1,2-Dichloroethane-d4 (Surr)		107				70 - 130					
4-Bromofluorobenzene (Surr)		96				70 - 130					
Dibromofluoromethane (Surr)		105				70 - 130					
Toluene-d8 (Surr)		98				70 - 130					

Lab Sample ID: LCS 490-115823/3

Matrix: Water

Analysis Batch: 115823

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCN	LCN	Unit	D	%Rec	Limits
		Result	Qualifier				
Benzene	50.0	48.88		ug/L		98	80 - 121
Toluene	50.0	50.23		ug/L		100	80 - 126
Ethylbenzene	50.0	49.48		ug/L		99	80 - 130
Xylenes, Total	100	98.07		ug/L		98	80 - 132
Methyl tert-butyl ether	50.0	49.14		ug/L		98	72 - 133
1,1,1,2-Tetrachloroethane	50.0	52.53		ug/L		105	74 - 135
1,1,1-Trichloroethane	50.0	50.34		ug/L		101	78 - 135
1,1,2,2-Tetrachloroethane	50.0	52.66		ug/L		105	69 - 131
1,1,2-Trichloroethane	50.0	52.65		ug/L		105	80 - 124
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	46.59		ug/L		93	77 - 129
1,1-Dichloroethane	50.0	47.36		ug/L		95	78 - 125
1,1-Dichloroethene	50.0	47.10		ug/L		94	79 - 124
1,1-Dichloropropene	50.0	49.03		ug/L		98	80 - 122
1,2,3-Trichlorobenzene	50.0	53.79		ug/L		108	62 - 133
1,2,3-Trichloropropane	50.0	51.08		ug/L		102	70 - 131
1,2,4-Trichlorobenzene	50.0	54.56		ug/L		109	63 - 133
1,2,4-Trimethylbenzene	50.0	50.01		ug/L		100	77 - 126
1,3,5-Trimethylbenzene	50.0	50.32		ug/L		101	77 - 127

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI

Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1

SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-115823/3

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Matrix: Water

Analysis Batch: 115823

Analyte	Spike Added	LCS		Unit	D	%Rec	%Rec.
		Result	Qualifier				
cis-1,2-Dichloroethene	50.0	49.73		ug/L	99	76 - 125	
1,2-Dibromo-3-Chloropropane	50.0	53.47		ug/L	107	54 - 125	
1,2-Dibromoethane (EDB)	50.0	53.22		ug/L	106	80 - 129	
1,2-Dichlorobenzene	50.0	52.28		ug/L	105	80 - 121	
1,2-Dichloroethane	50.0	52.78		ug/L	106	77 - 121	
1,2-Dichloropropane	50.0	49.16		ug/L	98	75 - 120	
trans-1,2-Dichloroethene	50.0	48.01		ug/L	96	79 - 126	
cis-1,3-Dichloropropene	50.0	51.80		ug/L	104	74 - 140	
1,3-Dichlorobenzene	50.0	51.41		ug/L	103	80 - 122	
1,3-Dichloropropane	50.0	52.72		ug/L	105	80 - 125	
trans-1,3-Dichloropropene	50.0	53.34		ug/L	107	63 - 134	
1,4-Dichlorobenzene	50.0	50.98		ug/L	102	80 - 120	
2,2-Dichloropropane	50.0	46.36		ug/L	93	43 - 161	
2-Chlorotoluene	50.0	48.19		ug/L	96	75 - 126	
4-Chlorotoluene	50.0	50.62		ug/L	101	75 - 130	
4-Methyl-2-pentanone (MIBK)	250	271.5		ug/L	109	60 - 137	
Acetone	250	242.2		ug/L	97	54 - 145	
Bromobenzene	50.0	48.49		ug/L	97	68 - 130	
Bromochloromethane	50.0	54.78		ug/L	110	78 - 129	
Bromoform	50.0	60.32		ug/L	121	46 - 145	
Bromomethane	50.0	57.34		ug/L	115	41 - 150	
Carbon disulfide	50.0	46.13		ug/L	92	77 - 126	
Carbon tetrachloride	50.0	52.11		ug/L	104	64 - 147	
Chlorobenzene	50.0	49.76		ug/L	100	80 - 120	
Dibromochloromethane	50.0	55.69		ug/L	111	69 - 133	
Chloroethane	50.0	49.27		ug/L	99	72 - 120	
Chloroform	50.0	51.15		ug/L	102	73 - 129	
Chloromethane	50.0	43.50		ug/L	87	12 - 150	
Dibromomethane	50.0	53.49		ug/L	107	71 - 125	
Dichlorobromomethane	50.0	52.35		ug/L	105	75 - 129	
Dichlorodifluoromethane	50.0	55.33		ug/L	111	37 - 127	
Hexachloro-1,3-butadiene	50.0	53.63		ug/L	107	49 - 146	
Isopropylbenzene	50.0	49.93		ug/L	100	80 - 141	
2-Butanone (MEK)	250	261.3		ug/L	105	62 - 133	
Methylene Chloride	50.0	46.25		ug/L	92	79 - 123	
2-Hexanone	250	272.9		ug/L	109	60 - 142	
Naphthalene	50.0	52.82		ug/L	106	62 - 138	
n-Butylbenzene	50.0	54.57		ug/L	109	68 - 132	
n-Propylbenzene	50.0	50.30		ug/L	101	75 - 129	
p-Isopropyltoluene	50.0	50.91		ug/L	102	75 - 128	
sec-Butylbenzene	50.0	50.92		ug/L	102	76 - 128	
Styrene	50.0	53.86		ug/L	108	80 - 127	
tert-Butylbenzene	50.0	43.62		ug/L	87	76 - 126	
Tetrachloroethene	50.0	48.62		ug/L	97	80 - 126	
Trichloroethene	50.0	51.77		ug/L	104	80 - 123	
Trichlorofluoromethane	50.0	51.25		ug/L	102	65 - 124	
Vinyl chloride	50.0	44.99		ug/L	90	68 - 120	

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCS 490-115823/3

Matrix: Water

Analysis Batch: 115823

Surrogate	LCS	LCS	%Recovery	Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	106				70 - 130
4-Bromofluorobenzene (Surr)	95				70 - 130
Dibromofluoromethane (Surr)	106				70 - 130
Toluene-d8 (Surr)	102				70 - 130

Lab Sample ID: LCSD 490-115823/4

Matrix: Water

Analysis Batch: 115823

Analyte	Spike Added	LCS	LCSD	LCSD	Unit	D	%Rec	Limits	%Rec.	RPD	RPD Limit
		Result	Qualifier								
Benzene	50.0	50.58		ug/L	101			80 - 121	3	17	
Toluene	50.0	51.61		ug/L	103			80 - 126	3	15	
Ethylbenzene	50.0	50.55		ug/L	101			80 - 130	2	15	
Xylenes, Total	100	100.6		ug/L	101			80 - 132	3	15	
Methyl tert-butyl ether	50.0	48.57		ug/L	97			72 - 133	1	16	
1,1,1,2-Tetrachloroethane	50.0	52.85		ug/L	106			74 - 135	1	16	
1,1,1-Trichloroethane	50.0	52.11		ug/L	104			78 - 135	3	17	
1,1,2,2-Tetrachloroethane	50.0	53.39		ug/L	107			69 - 131	1	20	
1,1,2-Trichloroethane	50.0	51.67		ug/L	103			80 - 124	2	15	
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	48.01		ug/L	96			77 - 129	3	18	
1,1-Dichloroethane	50.0	49.32		ug/L	99			78 - 125	4	17	
1,1-Dichloroethene	50.0	48.41		ug/L	97			79 - 124	3	17	
1,1-Dichloropropene	50.0	51.35		ug/L	103			80 - 122	5	17	
1,2,3-Trichlorobenzene	50.0	54.13		ug/L	108			62 - 133	1	25	
1,2,3-Trichloropropane	50.0	51.48		ug/L	103			70 - 131	1	19	
1,2,4-Trichlorobenzene	50.0	56.12		ug/L	112			63 - 133	3	19	
1,2,4-Trimethylbenzene	50.0	52.54		ug/L	105			77 - 126	5	16	
1,3,5-Trimethylbenzene	50.0	53.14		ug/L	106			77 - 127	5	17	
cis-1,2-Dichloroethene	50.0	54.59		ug/L	109			76 - 125	9	17	
1,2-Dibromo-3-Chloropropane	50.0	54.65		ug/L	109			54 - 125	2	24	
1,2-Dibromoethane (EDB)	50.0	52.91		ug/L	106			80 - 129	1	15	
1,2-Dichlorobenzene	50.0	52.79		ug/L	106			80 - 121	1	15	
1,2-Dichloroethane	50.0	53.54		ug/L	107			77 - 121	1	17	
1,2-Dichloropropene	50.0	51.05		ug/L	102			75 - 120	4	17	
trans-1,2-Dichloroethene	50.0	49.78		ug/L	100			79 - 126	4	16	
cis-1,3-Dichloropropene	50.0	51.14		ug/L	102			74 - 140	1	15	
1,3-Dichlorobenzene	50.0	53.58		ug/L	107			80 - 122	4	15	
1,3-Dichloropropane	50.0	51.12		ug/L	102			80 - 125	3	14	
trans-1,3-Dichloropropene	50.0	52.41		ug/L	105			63 - 134	2	14	
1,4-Dichlorobenzene	50.0	52.92		ug/L	106			80 - 120	4	15	
2,2-Dichloropropane	50.0	49.11		ug/L	98			43 - 161	6	18	
2-Chlorotoluene	50.0	50.78		ug/L	102			75 - 126	5	17	
4-Chlorotoluene	50.0	53.46		ug/L	107			75 - 130	5	18	
4-Methyl-2-pentanone (MIBK)	250	260.5		ug/L	104			60 - 137	4	17	
Acetone	250	243.4		ug/L	97			54 - 145	0	21	
Bromobenzene	50.0	51.21		ug/L	102			68 - 130	5	20	
Bromoform	50.0	55.02		ug/L	110			78 - 129	0	17	

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: LCSD 490-115823/4

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analysis Batch: 115823

Analyte	Spike	LCSD	LCSD	Unit	D	%Rec	Limits	RPD	RPD Limit
	Added	Result	Qualifier						
Bromoform	50.0	60.32		ug/L		121	46 - 145	0	16
Bromomethane	50.0	60.33		ug/L		121	41 - 150	5	50
Carbon disulfide	50.0	48.03		ug/L		96	77 - 126	4	21
Carbon tetrachloride	50.0	53.93		ug/L		108	64 - 147	3	19
Chlorobenzene	50.0	50.08		ug/L		100	80 - 120	1	14
Dibromochloromethane	50.0	55.56		ug/L		111	69 - 133	0	15
Chloroethane	50.0	52.27		ug/L		105	72 - 120	6	20
Chloroform	50.0	52.66		ug/L		105	73 - 129	3	18
Chloromethane	50.0	45.48		ug/L		91	12 - 150	4	31
Dibromomethane	50.0	53.62		ug/L		107	71 - 125	0	16
Dichlorobromomethane	50.0	54.22		ug/L		108	75 - 129	4	18
Dichlorodifluoromethane	50.0	55.00		ug/L		110	37 - 127	1	18
Hexachloro-1,3-butadiene	50.0	56.51		ug/L		113	49 - 146	5	23
Isopropylbenzene	50.0	51.22		ug/L		102	80 - 141	3	16
2-Butanone (MEK)	250	260.2		ug/L		104	62 - 133	0	19
Methylene Chloride	50.0	46.63		ug/L		93	79 - 123	1	17
2-Hexanone	250	264.2		ug/L		106	60 - 142	3	15
Naphthalene	50.0	52.00		ug/L		104	62 - 138	2	26
n-Butylbenzene	50.0	56.90		ug/L		114	68 - 132	4	18
n-Propylbenzene	50.0	52.79		ug/L		106	75 - 129	5	17
p-Isopropyltoluene	50.0	53.70		ug/L		107	75 - 128	5	16
sec-Butylbenzene	50.0	53.56		ug/L		107	76 - 128	5	16
Styrene	50.0	55.45		ug/L		111	80 - 127	3	24
tert-Butylbenzene	50.0	46.09		ug/L		92	76 - 126	6	16
Tetrachloroethene	50.0	51.63		ug/L		103	80 - 126	6	16
Trichloroethene	50.0	54.61		ug/L		109	80 - 123	5	17
Trichlorofluoromethane	50.0	53.50		ug/L		107	65 - 124	4	18
Vinyl chloride	50.0	47.29		ug/L		95	68 - 120	5	17

Surrogate	LCSD	LCSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	106		70 - 130
4-Bromofluorobenzene (Surr)	99		70 - 130
Dibromofluoromethane (Surr)	107		70 - 130
Toluene-d8 (Surr)	102		70 - 130

Lab Sample ID: 490-37879-A-10 MS

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analysis Batch: 115823

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits
	Result	Qualifier	Added	Result	Qualifier				
Benzene	1.55		50.0	54.05		ug/L		105	75 - 133
Toluene	0.666		50.0	55.66		ug/L		110	75 - 136
Ethylbenzene	0.270	J	50.0	52.46		ug/L		104	79 - 139
Xylenes, Total	<1.50		100	102.8		ug/L		103	74 - 141
Methyl tert-butyl ether	<0.500		50.0	49.20		ug/L		98	66 - 141
1,1,1,2-Tetrachloroethane	<0.500		50.0	54.82		ug/L		110	73 - 141
1,1,1-Trichloroethane	<0.500		50.0	55.61		ug/L		111	76 - 149
1,1,2,2-Tetrachloroethane	<0.500		50.0	55.39		ug/L		111	56 - 143

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-37879-A-10 MS

Matrix: Water

Analysis Batch: 115823

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	Limits		
	Result	Qualifier	Added	Result	Qualifier						
1,1,2-Trichloroethane	<0.500		50.0	53.49		ug/L		107	74 - 134		
1,1,2-Trichloro-1,2,2-trifluoroethane	<1.00		50.0	50.41		ug/L		101	72 - 148		
1,1-Dichloroethane	<0.500		50.0	52.46		ug/L		105	71 - 139		
1,1-Dichloroethene	<0.500		50.0	52.83		ug/L		106	70 - 142		
1,1-Dichloropropene	<0.500		50.0	54.16		ug/L		108	76 - 139		
1,2,3-Trichlorobenzene	<0.500		50.0	39.26		ug/L		79	55 - 138		
1,2,3-Trichloropropane	<0.500		50.0	50.09		ug/L		100	53 - 144		
1,2,4-Trichlorobenzene	<0.500		50.0	38.97		ug/L		78	60 - 136		
1,2,4-Trimethylbenzene	<0.500		50.0	46.33		ug/L		93	69 - 136		
1,3,5-Trimethylbenzene	<0.500		50.0	45.93		ug/L		92	69 - 139		
cis-1,2-Dichloroethene	<0.500		50.0	53.92		ug/L		108	68 - 138		
1,2-Dibromo-3-Chloropropane	<5.00		50.0	54.93		ug/L		110	52 - 126		
1,2-Dibromoethane (EDB)	<0.500		50.0	51.50		ug/L		103	75 - 137		
1,2-Dichlorobenzene	<0.500		50.0	47.80		ug/L		96	79 - 128		
1,2-Dichloroethane	<0.500		50.0	55.17		ug/L		110	64 - 136		
1,2-Dichloropropane	<0.500		50.0	53.67		ug/L		107	67 - 131		
trans-1,2-Dichloroethene	<0.500		50.0	52.75		ug/L		105	66 - 143		
cis-1,3-Dichloropropene	<0.500		50.0	53.37		ug/L		107	71 - 141		
1,3-Dichlorobenzene	<0.500		50.0	47.34		ug/L		95	77 - 131		
1,3-Dichloropropane	<0.500		50.0	54.66		ug/L		109	72 - 134		
trans-1,3-Dichloropropene	<0.500		50.0	52.04		ug/L		104	59 - 135		
1,4-Dichlorobenzene	<0.500		50.0	47.48		ug/L		95	78 - 126		
2,2-Dichloropropane	<0.500		50.0	45.65		ug/L		91	37 - 175		
2-Chlorotoluene	<0.500		50.0	46.15		ug/L		92	67 - 138		
4-Chlorotoluene	<0.500		50.0	48.33		ug/L		97	69 - 138		
4-Methyl-2-pentanone (MIBK)	<5.00		250	293.5		ug/L		117	50 - 147		
Acetone	15.6		250	272.6		ug/L		103	45 - 141		
Bromobenzene	<0.500		50.0	48.51		ug/L		97	60 - 138		
Bromochloromethane	<0.500		50.0	56.12		ug/L		112	67 - 139		
Bromoform	<0.500		50.0	59.18		ug/L		118	42 - 147		
Bromomethane	<0.500		50.0	43.72		ug/L		87	16 - 163		
Carbon disulfide	0.222 J		50.0	55.65		ug/L		111	48 - 152		
Carbon tetrachloride	<0.500		50.0	50.72		ug/L		101	62 - 164		
Chlorobenzene	<0.500		50.0	51.62		ug/L		103	80 - 129		
Dibromochloromethane	<0.500		50.0	56.13		ug/L		112	66 - 140		
Chloroethane	<0.500		50.0	52.75		ug/L		106	58 - 137		
Chloroform	<0.500		50.0	55.17		ug/L		110	66 - 138		
Chloromethane	<0.500		50.0	44.20		ug/L		88	10 - 169		
Dibromomethane	<0.500		50.0	54.02		ug/L		108	58 - 140		
Dichlorobromomethane	<0.500		50.0	54.64		ug/L		109	70 - 140		
Dichlorodifluoromethane	<0.500		50.0	46.04		ug/L		92	40 - 127		
Hexachloro-1,3-butadiene	<1.00		50.0	15.69 F		ug/L		31	45 - 155		
Isopropylbenzene	<1.00		50.0	50.88		ug/L		102	80 - 153		
2-Butanone (MEK)	4.04 J		250	240.5		ug/L		95	50 - 138		
Methylene Chloride	<5.00		50.0	47.83		ug/L		96	64 - 139		
2-Hexanone	<5.00		250	277.4		ug/L		111	50 - 150		
Naphthalene	2.15 J		50.0	54.39		ug/L		104	55 - 140		

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
 Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
 SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-37879-A-10 MS

Matrix: Water

Analysis Batch: 115823

Client Sample ID: Matrix Spike
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MS	MS	Unit	D	%Rec	%Rec.
	Result	Qualifier	Added	Result	Qualifier				
n-Butylbenzene	<0.500		50.0	38.01		ug/L	76	66 - 141	
n-Propylbenzene	<0.500		50.0	47.03		ug/L	94	69 - 142	
p-Isopropyltoluene	<0.500		50.0	41.45		ug/L	83	71 - 137	
sec-Butylbenzene	<0.500		50.0	40.99		ug/L	82	73 - 138	
Styrene	<0.500		50.0	53.96		ug/L	108	61 - 148	
tert-Butylbenzene	0.330	J	50.0	38.86		ug/L	77	70 - 138	
Tetrachloroethene	<0.500		50.0	52.45		ug/L	105	72 - 145	
Trichloroethene	<0.500		50.0	56.80		ug/L	114	73 - 144	
Trichlorofluoromethane	<0.500		50.0	55.63		ug/L	111	58 - 139	
Vinyl chloride	<0.500		50.0	46.54		ug/L	93	56 - 129	
<hr/>									
Surrogate									
	MS	MS							
	%Recovery	Qualifier				Limits			
1,2-Dichloroethane-d4 (Surr)	107					70 - 130			
4-Bromofluorobenzene (Surr)	96					70 - 130			
Dibromofluoromethane (Surr)	106					70 - 130			
Toluene-d8 (Surr)	105					70 - 130			

Lab Sample ID: 490-37879-A-10 MSD

Matrix: Water

Analysis Batch: 115823

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	%Rec.	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier						
Benzene	1.55		50.0	55.79		ug/L	108	75 - 133		3	17
Toluene	0.666		50.0	55.47		ug/L	110	75 - 136		0	15
Ethylbenzene	0.270	J	50.0	51.53		ug/L	103	79 - 139		2	15
Xylenes, Total	<1.50		100	102.8		ug/L	103	74 - 141		0	15
Methyl tert-butyl ether	<0.500		50.0	49.52		ug/L	99	66 - 141		1	16
1,1,1,2-Tetrachloroethane	<0.500		50.0	53.71		ug/L	107	73 - 141		2	16
1,1,1-Trichloroethane	<0.500		50.0	56.28		ug/L	113	76 - 149		1	17
1,1,2,2-Tetrachloroethane	<0.500		50.0	55.80		ug/L	112	56 - 143		1	20
1,1,2-Trichloroethane	<0.500		50.0	54.23		ug/L	108	74 - 134		1	15
1,1,2-Trichloro-1,2,2-trifluoroetha ne	<1.00		50.0	51.75		ug/L	104	72 - 148		3	18
1,1-Dichloroethane	<0.500		50.0	53.04		ug/L	106	71 - 139		1	17
1,1-Dichloroethene	<0.500		50.0	53.57		ug/L	107	70 - 142		1	17
1,1-Dichloropropene	<0.500		50.0	54.70		ug/L	109	76 - 139		1	17
1,2,3-Trichlorobenzene	<0.500		50.0	39.83		ug/L	80	55 - 138		1	25
1,2,3-Trichloropropane	<0.500		50.0	51.13		ug/L	102	53 - 144		2	19
1,2,4-Trichlorobenzene	<0.500		50.0	39.75		ug/L	79	60 - 136		2	19
1,2,4-Trimethylbenzene	<0.500		50.0	46.86		ug/L	94	69 - 136		1	16
1,3,5-Trimethylbenzene	<0.500		50.0	47.09		ug/L	94	69 - 139		3	17
cis-1,2-Dichloroethene	<0.500		50.0	54.33		ug/L	109	68 - 138		1	17
1,2-Dibromo-3-Chloropropane	<5.00		50.0	57.66		ug/L	115	52 - 126		5	24
1,2-Dibromoethane (EDB)	<0.500		50.0	50.59		ug/L	101	75 - 137		2	15
1,2-Dichlorobenzene	<0.500		50.0	49.50		ug/L	99	79 - 128		3	15
1,2-Dichloroethane	<0.500		50.0	55.31		ug/L	111	64 - 136		0	17
1,2-Dichloropropene	<0.500		50.0	54.26		ug/L	109	67 - 131		1	17
trans-1,2-Dichloroethene	<0.500		50.0	53.44		ug/L	107	66 - 143		1	16

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI

Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1

SDG: 08115513

Method: 8260B - Volatile Organic Compounds (GC/MS) (Continued)

Lab Sample ID: 490-37879-A-10 MSD

Matrix: Water

Analysis Batch: 115823

Client Sample ID: Matrix Spike Duplicate
Prep Type: Total/NA

Analyte	Sample	Sample	Spike	MSD	MSD	Unit	D	%Rec	Limits	RPD	RPD	Limit
	Result	Qualifier	Added	Result	Qualifier							
cis-1,3-Dichloropropene	<0.500		50.0	52.50		ug/L		105	71 - 141	2	15	
1,3-Dichlorobenzene	<0.500		50.0	48.14		ug/L		96	77 - 131	2	15	
1,3-Dichloropropane	<0.500		50.0	54.05		ug/L		108	72 - 134	1	14	
trans-1,3-Dichloropropene	<0.500		50.0	52.25		ug/L		105	59 - 135	0	14	
1,4-Dichlorobenzene	<0.500		50.0	47.83		ug/L		96	78 - 126	1	15	
2,2-Dichloropropane	<0.500		50.0	45.43		ug/L		91	37 - 175	0	18	
2-Chlorotoluene	<0.500		50.0	46.65		ug/L		93	67 - 138	1	17	
4-Chlorotoluene	<0.500		50.0	49.70		ug/L		99	69 - 138	3	18	
4-Methyl-2-pentanone (MIBK)	<5.00		250	290.6		ug/L		116	50 - 147	1	17	
Acetone	15.6		250	294.8		ug/L		112	45 - 141	8	21	
Bromobenzene	<0.500		50.0	48.50		ug/L		97	60 - 138	0	20	
Bromochloromethane	<0.500		50.0	56.78		ug/L		114	67 - 139	1	17	
Bromoform	<0.500		50.0	58.87		ug/L		118	42 - 147	1	16	
Bromomethane	<0.500		50.0	50.91		ug/L		102	16 - 163	15	50	
Carbon disulfide	0.222	J	50.0	58.01		ug/L		116	48 - 152	4	21	
Carbon tetrachloride	<0.500		50.0	49.38		ug/L		99	62 - 164	3	19	
Chlorobenzene	<0.500		50.0	50.99		ug/L		102	80 - 129	1	14	
Dibromochloromethane	<0.500		50.0	54.92		ug/L		110	66 - 140	2	15	
Chloroethane	<0.500		50.0	54.14		ug/L		108	58 - 137	3	20	
Chloroform	<0.500		50.0	55.47		ug/L		111	66 - 138	1	18	
Chloromethane	<0.500		50.0	46.36		ug/L		93	10 - 169	5	31	
Dibromomethane	<0.500		50.0	54.45		ug/L		109	58 - 140	1	16	
Dichlorobromomethane	<0.500		50.0	55.96		ug/L		112	70 - 140	2	18	
Dichlorodifluoromethane	<0.500		50.0	48.64		ug/L		97	40 - 127	5	18	
Hexachloro-1,3-butadiene	<1.00		50.0	15.76	F	ug/L		32	45 - 155	0	23	
Isopropylbenzene	<1.00		50.0	50.27		ug/L		101	80 - 153	1	16	
2-Butanone (MEK)	4.04	J	250	247.6		ug/L		97	50 - 138	3	19	
Methylene Chloride	<5.00		50.0	48.76		ug/L		98	64 - 139	2	17	
2-Hexanone	<5.00		250	274.1		ug/L		110	50 - 150	1	15	
Naphthalene	2.15	J	50.0	57.55		ug/L		111	55 - 140	6	26	
n-Butylbenzene	<0.500		50.0	38.43		ug/L		77	66 - 141	1	18	
n-Propylbenzene	<0.500		50.0	47.00		ug/L		94	69 - 142	0	17	
p-Isopropyltoluene	<0.500		50.0	41.67		ug/L		83	71 - 137	1	16	
sec-Butylbenzene	<0.500		50.0	41.46		ug/L		83	73 - 138	1	16	
Styrene	<0.500		50.0	54.84		ug/L		110	61 - 148	2	24	
tert-Butylbenzene	0.330	J	50.0	39.38		ug/L		78	70 - 138	1	16	
Tetrachloroethene	<0.500		50.0	51.84		ug/L		104	72 - 145	1	16	
Trichloroethene	<0.500		50.0	55.83		ug/L		112	73 - 144	2	17	
Trichlorofluoromethane	<0.500		50.0	57.36		ug/L		115	58 - 139	3	18	
Vinyl chloride	<0.500		50.0	47.63		ug/L		95	56 - 129	2	17	

Surrogate	MSD	MSD	Limits
	%Recovery	Qualifier	
1,2-Dichloroethane-d4 (Surr)	106		70 - 130
4-Bromofluorobenzene (Surr)	97		70 - 130
Dibromofluoromethane (Surr)	104		70 - 130
Toluene-d8 (Surr)	103		70 - 130

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
SDG: 08115513

Method: 8015B GRO LL - Gasoline Range Organics - (GC)

Lab Sample ID: MB 490-114647/8

Matrix: Water

Analysis Batch: 114647

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
C4-C12	<50.0		50.0	38.0	ug/L			10/16/13 11:42	1
Surrogate	MB	MB	Limits			D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
a,a,a-Trifluorotoluene	101		50 - 150					10/16/13 11:42	1

Lab Sample ID: LCS 490-114647/6

Matrix: Water

Analysis Batch: 114647

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	MB	MB	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Result	Qualifier							
C4-C12			1000	1052		ug/L		105	57 - 140
Surrogate	LCS	LCS	Limits				D	%Rec.	Limits
	%Recovery	Qualifier							
a,a,a-Trifluorotoluene	88		50 - 150						

Lab Sample ID: LCSD 490-114647/7

Matrix: Water

Analysis Batch: 114647

Client Sample ID: Lab Control Sample Dup
Prep Type: Total/NA

Analyte	MB	MB	Spike	LCSD	LCSD	Unit	D	%Rec.	RPD	Limit
	Result	Qualifier								
C4-C12			1000	1046		ug/L		105	57 - 140	1
Surrogate	LCSD	LCSD	Limits				D	%Rec.	RPD	Limit
	%Recovery	Qualifier								
a,a,a-Trifluorotoluene	89		50 - 150							

Method: 8015B - Diesel Range Organics (DRO) (GC)

Lab Sample ID: MB 490-114790/1-A

Matrix: Water

Analysis Batch: 115116

Client Sample ID: Method Blank
Prep Type: Total/NA
Prep Batch: 114790

Analyte	MB	MB	PQL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
	Result	Qualifier							
Diesel Range Organics [C10-C28]	47.75	J	500	40.0	ug/L		10/16/13 12:18	10/17/13 14:44	1
Surrogate	MB	MB	Limits			D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
ORO C24-C40	<500		500	40.0	ug/L		10/16/13 12:18	10/17/13 14:44	1
Surrogate	LCS	LCS	Limits			D	Prepared	Analyzed	Dil Fac
	%Recovery	Qualifier							
o-Terphenyl (Sur)	85		50 - 150				10/16/13 12:18	10/17/13 14:44	1

Lab Sample ID: LCS 490-114790/2-A

Matrix: Water

Analysis Batch: 115116

Client Sample ID: Lab Control Sample
Prep Type: Total/NA
Prep Batch: 114790

Analyte	MB	MB	Spike	LCS	LCS	Unit	D	%Rec.	Limits
	Result	Qualifier							
Diesel Range Organics [C10-C28]			800	888.5		ug/L		111	46 - 132

TestAmerica Nashville

QC Sample Results

Client: Cardno ERI

Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1

SDG: 08115513

Method: 8015B - Diesel Range Organics (DRO) (GC) (Continued)

Lab Sample ID: LCS 490-114790/2-A

Matrix: Water

Analysis Batch: 115116

Client Sample ID: Lab Control Sample

Prep Type: Total/NA

Prep Batch: 114790

Surrogate	LCS	LCS	
	%Recovery	Qualifier	Limits
o-Terphenyl (Surrogate)	94		50 - 150

QC Association Summary

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
SDG: 08115513

GC/MS VOA

Analysis Batch: 115356

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-37692-B-2 MS	Matrix Spike	Total/NA	Water	8260B	1
490-37692-C-2 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	2
490-37792-1	W-93-MMW-04	Total/NA	Ground Water	8260B	3
490-37792-2	W-94-MMW-05	Total/NA	Ground Water	8260B	4
490-37792-3	W-95-MW6A	Total/NA	Ground Water	8260B	5
490-37792-4	W-94-MW6B	Total/NA	Ground Water	8260B	6
490-37792-5	W-94-MW6C	Total/NA	Ground Water	8260B	7
490-37792-6	W-95-MW9A	Total/NA	Ground Water	8260B	8
490-37792-7	W-93-MW9B	Total/NA	Ground Water	8260B	9
490-37792-8	W-99-MW9C	Total/NA	Ground Water	8260B	10
490-37792-9	QCTB	Total/NA	Water	8260B	11
490-37792-10	dup	Total/NA	Ground Water	8260B	12
LCS 490-115356/3	Lab Control Sample	Total/NA	Water	8260B	13
LCSD 490-115356/4	Lab Control Sample Dup	Total/NA	Water	8260B	
MB 490-115356/7	Method Blank	Total/NA	Water	8260B	

Analysis Batch: 115823

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-37792-4	W-94-MW6B	Total/NA	Ground Water	8260B	1
490-37792-5	W-94-MW6C	Total/NA	Ground Water	8260B	2
490-37792-6	W-95-MW9A	Total/NA	Ground Water	8260B	3
490-37792-10	dup	Total/NA	Ground Water	8260B	4
490-37879-A-10 MS	Matrix Spike	Total/NA	Water	8260B	5
490-37879-A-10 MSD	Matrix Spike Duplicate	Total/NA	Water	8260B	6
LCS 490-115823/3	Lab Control Sample	Total/NA	Water	8260B	7
LCSD 490-115823/4	Lab Control Sample Dup	Total/NA	Water	8260B	8
MB 490-115823/7	Method Blank	Total/NA	Water	8260B	9

GC VOA

Analysis Batch: 114647

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-37792-1	W-93-MMW-04	Total/NA	Ground Water	8015B GRO LL	1
490-37792-2	W-94-MMW-05	Total/NA	Ground Water	8015B GRO LL	2
490-37792-3	W-95-MW6A	Total/NA	Ground Water	8015B GRO LL	3
490-37792-4	W-94-MW6B	Total/NA	Ground Water	8015B GRO LL	4
490-37792-5	W-94-MW6C	Total/NA	Ground Water	8015B GRO LL	5
490-37792-6	W-95-MW9A	Total/NA	Ground Water	8015B GRO LL	6
490-37792-7	W-93-MW9B	Total/NA	Ground Water	8015B GRO LL	7
490-37792-8	W-99-MW9C	Total/NA	Ground Water	8015B GRO LL	8
490-37792-10	dup	Total/NA	Ground Water	8015B GRO LL	9
LCS 490-114647/6	Lab Control Sample	Total/NA	Water	8015B GRO LL	10
LCSD 490-114647/7	Lab Control Sample Dup	Total/NA	Water	8015B GRO LL	11
MB 490-114647/8	Method Blank	Total/NA	Water	8015B GRO LL	12

GC Semi VOA

Prep Batch: 114790

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-37792-1	W-93-MMW-04	Total/NA	Ground Water	3510C	

TestAmerica Nashville

QC Association Summary

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
SDG: 08115513

GC Semi VOA (Continued)

Prep Batch: 114790 (Continued)

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-37792-2	W-94-MMW-05	Total/NA	Ground Water	3510C	5
490-37792-3	W-95-MW6A	Total/NA	Ground Water	3510C	6
490-37792-4	W-94-MW6B	Total/NA	Ground Water	3510C	7
490-37792-5	W-94-MW6C	Total/NA	Ground Water	3510C	8
490-37792-6	W-95-MW9A	Total/NA	Ground Water	3510C	9
490-37792-7	W-93-MW9B	Total/NA	Ground Water	3510C	10
490-37792-8	W-99-MW9C	Total/NA	Ground Water	3510C	11
490-37792-10	dup	Total/NA	Ground Water	3510C	12
LCS 490-114790/2-A	Lab Control Sample	Total/NA	Water	3510C	13
MB 490-114790/1-A	Method Blank	Total/NA	Water	3510C	

Analysis Batch: 115116

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
490-37792-1	W-93-MMW-04	Total/NA	Ground Water	8015B	114790
490-37792-2	W-94-MMW-05	Total/NA	Ground Water	8015B	114790
490-37792-3	W-95-MW6A	Total/NA	Ground Water	8015B	114790
490-37792-4	W-94-MW6B	Total/NA	Ground Water	8015B	114790
490-37792-5	W-94-MW6C	Total/NA	Ground Water	8015B	114790
490-37792-6	W-95-MW9A	Total/NA	Ground Water	8015B	114790
490-37792-7	W-93-MW9B	Total/NA	Ground Water	8015B	114790
490-37792-8	W-99-MW9C	Total/NA	Ground Water	8015B	114790
490-37792-10	dup	Total/NA	Ground Water	8015B	114790
LCS 490-114790/2-A	Lab Control Sample	Total/NA	Water	8015B	114790
MB 490-114790/1-A	Method Blank	Total/NA	Water	8015B	114790

Lab Chronicle

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
SDG: 08115513

Client Sample ID: W-93-MMW-04

Lab Sample ID: 490-37792-1
Matrix: Ground Water

Date Collected: 10/10/13 02:36
Date Received: 10/15/13 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	115356	10/18/13 18:40	EML	TAL NSH
Total/NA	Analysis	8015B GRO LL		1	114647	10/16/13 16:44	GWM	TAL NSH
Total/NA	Prep	3510C			114790	10/16/13 12:18	FXM	TAL NSH
Total/NA	Analysis	8015B		1	115116	10/17/13 17:35	JLF	TAL NSH

Client Sample ID: W-94-MMW-05

Lab Sample ID: 490-37792-2
Matrix: Ground Water

Date Collected: 10/09/13 23:21
Date Received: 10/15/13 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	115356	10/18/13 19:07	EML	TAL NSH
Total/NA	Analysis	8015B GRO LL		1	114647	10/16/13 17:14	GWM	TAL NSH
Total/NA	Prep	3510C			114790	10/16/13 12:18	FXM	TAL NSH
Total/NA	Analysis	8015B		1	115116	10/17/13 17:50	JLF	TAL NSH

Client Sample ID: W-95-MW6A

Lab Sample ID: 490-37792-3
Matrix: Ground Water

Date Collected: 10/09/13 21:28
Date Received: 10/15/13 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	115356	10/18/13 19:33	EML	TAL NSH
Total/NA	Analysis	8015B GRO LL		1	114647	10/16/13 17:44	GWM	TAL NSH
Total/NA	Prep	3510C			114790	10/16/13 12:18	FXM	TAL NSH
Total/NA	Analysis	8015B		1	115116	10/17/13 18:06	JLF	TAL NSH

Client Sample ID: W-94-MW6B

Lab Sample ID: 490-37792-4
Matrix: Ground Water

Date Collected: 10/09/13 22:06
Date Received: 10/15/13 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	115356	10/18/13 20:00	EML	TAL NSH
Total/NA	Analysis	8260B		10	115823	10/21/13 18:47	EML	TAL NSH
Total/NA	Analysis	8015B GRO LL		1	114647	10/16/13 18:15	GWM	TAL NSH
Total/NA	Prep	3510C			114790	10/16/13 12:18	FXM	TAL NSH
Total/NA	Analysis	8015B		1	115116	10/17/13 18:22	JLF	TAL NSH

Client Sample ID: W-94-MW6C

Lab Sample ID: 490-37792-5
Matrix: Ground Water

Date Collected: 10/09/13 22:36
Date Received: 10/15/13 08:15

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	115356	10/18/13 20:27	EML	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
SDG: 08115513

Client Sample ID: W-94-MW6C

Date Collected: 10/09/13 22:36
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-5

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		5	115823	10/21/13 19:14	EML	TAL NSH
Total/NA	Analysis	8015B GRO LL		1	114647	10/16/13 18:45	GWM	TAL NSH
Total/NA	Prep	3510C			114790	10/16/13 12:18	FXM	TAL NSH
Total/NA	Analysis	8015B		1	115116	10/17/13 18:37	JLF	TAL NSH

Client Sample ID: W-95-MW9A

Date Collected: 10/10/13 00:04
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-6

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	115356	10/18/13 20:54	EML	TAL NSH
Total/NA	Analysis	8260B		5	115823	10/21/13 19:41	EML	TAL NSH
Total/NA	Analysis	8015B GRO LL		1	114647	10/16/13 19:15	GWM	TAL NSH
Total/NA	Prep	3510C			114790	10/16/13 12:18	FXM	TAL NSH
Total/NA	Analysis	8015B		1	115116	10/17/13 18:52	JLF	TAL NSH

Client Sample ID: W-93-MW9B

Date Collected: 10/10/13 00:53
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-7

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	115356	10/18/13 21:20	EML	TAL NSH
Total/NA	Analysis	8015B GRO LL		1	114647	10/16/13 19:45	GWM	TAL NSH
Total/NA	Prep	3510C			114790	10/16/13 12:18	FXM	TAL NSH
Total/NA	Analysis	8015B		1	115116	10/17/13 19:08	JLF	TAL NSH

Client Sample ID: W-99-MW9C

Date Collected: 10/10/13 01:59
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-8

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	115356	10/18/13 21:47	EML	TAL NSH
Total/NA	Analysis	8015B GRO LL		1	114647	10/16/13 20:15	GWM	TAL NSH
Total/NA	Prep	3510C			114790	10/16/13 12:18	FXM	TAL NSH
Total/NA	Analysis	8015B		1	115116	10/17/13 16:48	JLF	TAL NSH

Client Sample ID: QCTB

Date Collected: 10/09/13 06:00
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-9

Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	115356	10/18/13 17:46	EML	TAL NSH

TestAmerica Nashville

Lab Chronicle

Client: Cardno ERI
Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1
SDG: 08115513

Client Sample ID: dup

Date Collected: 10/09/13 00:01
Date Received: 10/15/13 08:15

Lab Sample ID: 490-37792-10

Matrix: Ground Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260B		1	115356	10/18/13 22:14	EML	TAL NSH
Total/NA	Analysis	8260B		5	115823	10/21/13 20:08	EML	TAL NSH
Total/NA	Analysis	8015B GRO LL		1	114647	10/16/13 20:45	GWM	TAL NSH
Total/NA	Prep	3510C			114790	10/16/13 12:18	FXM	TAL NSH
Total/NA	Analysis	8015B		1	115116	10/17/13 19:39	JLF	TAL NSH

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Method Summary

Client: Cardno ERI

Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1

SDG: 08115513

Method	Method Description	Protocol	Laboratory
8260B	Volatile Organic Compounds (GC/MS)	SW846	TAL NSH
8015B GRO LL	Gasoline Range Organics - (GC)	SW846	TAL NSH
8015B	Diesel Range Organics (DRO) (GC)	SW846	TAL NSH

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL NSH = TestAmerica Nashville, 2960 Foster Creighton Drive, Nashville, TN 37204, TEL (615)726-0177

Certification Summary

Client: Cardno ERI

Project/Site: Cardno - Jalk Fee

TestAmerica Job ID: 490-37792-1

SDG: 08115513

Laboratory: TestAmerica Nashville

Unless otherwise noted, all analytes for this laboratory were covered under each certification below.

Authority	Program	EPA Region	Certification ID	Expiration Date
California	NELAP	9	1168CA	10-31-13

The following analytes are included in this report, but are not certified under this certification:

Analysis Method	Prep Method	Matrix	Analyte
8015B	3510C	Ground Water	ORO C24-C40
8015B	3510C	Water	ORO C24-C40

The following analytes are included in this report, but certification is not offered by the governing authority:

Analysis Method	Prep Method	Matrix	Analyte
8260B		Ground Water	1,1,2-Trichloro-1,2,2-trifluoroethane
8260B		Ground Water	p-Isopropyltoluene
8260B		Water	1,1,2-Trichloro-1,2,2-trifluoroethane
8260B		Water	p-Isopropyltoluene

COOLER RECEIPT FORM



490-37792 Chain of Custody

Cooler Received/Opened On 10/15/2013 @ 0815

1. Tracking # 8457 (last 4 digits, FedEx)
- Courier: FedEx IR Gun ID 94660220
2. Temperature of rep. sample or temp blank when opened: 3.5 Degrees Celsius
3. If Item #2 temperature is 0°C or less, was the representative sample or temp blank frozen? YES NO NA
4. Were custody seals on outside of cooler? YES...NO...NA
If yes, how many and where: 1 Front
5. Were the seals intact, signed, and dated correctly? YES...NO...NA
6. Were custody papers inside cooler? YES...NO...NA
- I certify that I opened the cooler and answered questions 1-6 (initial) WDM
7. Were custody seals on containers: YES NO and Intact YES...NO...NA
Were these signed and dated correctly? YES...NO...NA
8. Packing mat'l used? Bubblewrap Plastic bag Peanuts Vermiculite Foam Insert Paper Other None
9. Cooling process: Ice Ice-pack Ice (direct contact) Dry ice Other None
10. Did all containers arrive in good condition (unbroken)? YES...NO...NA
11. Were all container labels complete (#, date, signed, pres., etc)? YES...NO...NA
12. Did all container labels and tags agree with custody papers? YES...NO...NA
- 13a. Were VOA vials received?
b. Was there any observable headspace present in any VOA vial? YES...NO...NA
14. Was there a Trip Blank in this cooler? YES...NO...NA If multiple coolers, sequence # AJH
I certify that I unloaded the cooler and answered questions 7-14 (initial) AJH
- 15a. On pres'd bottles, did pH test strips suggest preservation reached the correct pH level? YES...NO...NA
b. Did the bottle labels indicate that the correct preservatives were used YES...NO...NA
16. Was residual chlorine present? YES...NO...NA
I certify that I checked for chlorine and pH as per SOP and answered questions 15-16 (initial) AJH
17. Were custody papers properly filled out (ink, signed, etc)? YES...NO...NA
18. Did you sign the custody papers in the appropriate place? YES...NO...NA
19. Were correct containers used for the analysis requested? YES...NO...NA
20. Was sufficient amount of sample sent in each container? YES...NO...NA
I certify that I entered this project into LIMS and answered questions 17-20 (initial) AJH
- I certify that I attached a label with the unique LIMS number to each container (initial) AJH
21. Were there Non-Conformance issues at login? YES...NO Was a NCM generated? YES...NO...#



Nashville Division

Phone: 615-726-0177

2960 Foster Creighton

Toll Free: 800-765-0980

Nashville, TN 37204

Fax: 615-726-3404

Loc: 490
37792



Consultant Name: Cardno ERI

Account #: N/A PO#: 4502260554

page 1 of 2

Consultant Address: 4572 Telephone Road, Suite 916

Invoice To: Marla Madden

Consultant City/State/Zip: Ventura, CA 93003

Report To: Alex Fuentes

ExxonMobil Project Mgr: Marla Madden

ERI Project #/Activity #: 08115513

Consultant Project Mgr: James Anderson

ExxonMobil Site #: Former Jalk Fee

AFE #: XA.2011.53908

Consultant Telephone Number: (805) 644-4157 x 181802

Fax No.: (805) 644-5610

Site Address: 10607 Norwalk Blvd.

Sampler Name (Print): Alex Chairez

Site City, State, Zip: Santa Fe Springs, CA 90670

Sampler Signature: Chairez

Oversight Agency: CRWQCB-LAR

Sample ID	Field Point Name/ Location ID	Date Sampled	Time Sampled	No. of Containers Shipped	Grab	Composite	Field Filtered	Preservative	Matrix	Analyze For:	RUSH TAT (24 hour)	6-day TAT	Standard 10-day TAT	Due Date of Report
W-93-MMW-04	MMW-04	10/9/13	02:26	7	X			X		X X X X X			X	
W-94-MMW-05	MMW-05	10/9/13	23:21	7	X			X		X X X X X			X	
W-95-MW6A	MW6A	10/9/13	21:26	7	X			X		X X X X X			X	
W-94-MW6B	MW6B	10/9/13	22:02	7	X			X		X X X X X			X	
W-94-MW6C	MW6C	10/9/13	22:36	7	X			X		X X X X X			X	
W-MW7A	MW7A	10/9/13	7	X				X		X X X X X			X	
W-MW7B	MW7B	10/9/13	7	X				X		X X X X X			X	
W-MW7C	MW7C	10/9/13	7	X				X		X X X X X			X	
W-MW8A	MW8A	10/9/13	7	X				X		X X X X X			X	
W-MW8B	MW8B	10/9/13	7	X				X		X X X X X			X	

Comments/Special Instructions:

Exclude oxygenates from 8260B analysis

PLEASE E-MAIL ALL PDF FILES TO

alexander.fuentes@cardno.com

geotracker08@eri-us.com)

Laboratory Comments:

Temperature Upon Receipt: 2-1-4/07-C

Y N

Sample Containers Intact? Y N

VOA Vials Free of Headspace? Y N

QC Deliverables (please circle one)

Level 2

Level 3

Level 4

Relinquished by:

Date

Time

Received by:

Date

Time

CJ

10-10-13

05:11

Cardno Fridge

10-10-13

05:11

Relinquished by:

Date

Time

Received by (Lab personnel)

Date

Time

JL

10-11-13

15:10

May Davis

10-11-13

15:10

for A. Fuentes

Date

Time

Received by (Lab personnel)

Date

Time

Mat Graw

10-11-13

18:55

Oliver Orr

10-11-13

18:55

Vu Baner

10-14-13

17:00

Allen Shuster

10-15-13

17:15

35



Nashville Division

Phone: 615-726-0177

Loc: 490
37792

2960 Foster Creighton

Toll Free: 800-765-0980

Nashville, TN 37204

Fax: 615-726-3404

Consultant Name: Cardno ERI

Account #: N/A PO#: 4502260554

page 2 of 2

Consultant Address: 4572 Telephone Road, Suite 916

Invoice To: Marla Madden

Consultant City/State/Zip: Ventura, CA 93003

Report To: Alex Fuentes

ExxonMobil Project Mgr: Marla Madden

ERI Project #/Activity #: 08115513

Consultant Project Mgr: James Anderson

ExxonMobil Site #: Former Jalk Fee

AFE #: XA.2011.53908

Consultant Telephone Number: (805) 644-4157 x 181802

Fax No.: (805) 644-5610

Site Address: 10607 Norwalk Blvd.

Sampler Name (Print): Alex Chairez

Site City, State, Zip: Santa Fe Springs, CA 90670

Sampler Signature:

Oversight Agency: CRWQCB-LAR

Sample ID	Field Point Name/ Location ID	Date Sampled	Time Sampled	No. of Containers Shipped	Preservative	Matrix	Analyze For:			RUSH TAT (24 hour)	5-day TAT	Standard 10-day TAT	Due Date of Report										
							Methanol	Sodium Bisulfite	HCl	NaOH	H ₂ SO ₄ , Plastic	H ₂ SO ₄ , Glass	HNO ₃	Ice	None	Groundwater	Wastewater	Drinking Water	Sludge	Soil	Air	Other (specify):	
W-MW9C	MW9C	10/9/13	-	X																			
W-95-MW9A	MW9A	10/9/13	0004	7	X			X						X					X	X	X	X	
W-93-MW9B	MW9B	10/9/13	0053	7	X			X						X					X	X	X	X	
W-99-MW9C	MW9C	10/9/13	0159	7	X			X						X					X	X	X	X	
W-MW10A	MW10A	10/9/13	-	7	X			X						X					X	X	X	X	
W-MW10B	MW10B	10/9/13	-	7	X			X						X					X	X	X	X	
W-MW10C	MW10C	10/9/13	-	7	X			X						X					X	X	X	X	
QCTB	QCTB	10/9/13	0000	3	X			X						X									X
dup	dup	10/9/13	XXXX	7	X			X						X					X	X	X	X	

Comments/Special Instructions:
Exclude oxygenates from 8260B analysis

PLEASE E-MAIL ALL PDF FILES TO
alexander.fuentes@cardno.com
geotracker08@eri-us.com)

GLOBAL ID # SL184801463 / ERL

Laboratory Comments:

Temperature Upon Receipt: 2.1-40.7°C
Sample Containers Intact? Y N
VOA Vials Free of Headspace? Y N

Relinquished by:

	Date	Time	Received by:	Date	Time
	10-10-13	05:11	Cardno Friday	10-10-13	05:11

Relinquished by:

	Date	Time	Received by (Lab personnel):	Date	Time
	10-11-13	15:10	Marla Madden	10-11-13	15:10

FDR: A. Fuentes

	Date	Time	Received by (Lab personnel):	Date	Time
	10-11-13	18:55	Others	10-11-13	18:55

Mara Dunn

	Date	Time	Received by (Lab personnel):	Date	Time
	10/14/13	17:00	Adam Plaster	10/14/13	18:15

	Date	Time	Received by (Lab personnel):	Date	Time
	10/14/13	17:00	Adam Plaster	10/14/13	18:15

Login Sample Receipt Checklist

Client: Cardno ERI

Job Number: 490-37792-1

SDG Number: 08115513

Login Number: 37792

List Source: TestAmerica Nashville

List Number: 1

Creator: Huskey, Adam

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are intact.	N/A	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the containers received and the COC.	True	
Samples are received within Holding Time.	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified.	N/A	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

NON-HAZARDOUS WATER BILL OF LADING

Generator: ExxonMobil Oil Corporation

Generator address: 2555 W. 190th St. #1106, Torrance, CA 90504

Site: Talk Fee

Address: 10607 Norwalk Blvd.

City/State: Santa Fe Springs, CA

Generation date: 10-9-13

Amount purged: 439 gallons

Source of water: purging of various wells

In case of emergency, contact Cardno ERI at (805) 644-4157.

The above-listed, non-hazardous wastewater is/was transported to Cardno ERI's facility located at 4572 Telephone Rd., #916 Ventura, California 93003. Upon arrival at Cardno ERI's Ventura facility, waste is/was immediately transferred to a temporary holding tank, and later transported by vacuum truck under a separate manifest to the final TSDF for recycling.

Employee signature CES

Date: 10-9-13

NON-HAZARDOUS WATER BILL OF LADING

Generator: ExxonMobil Oil Corporation

Generator address: 2555 W. 190th St. #1106, Torrance, CA 90504

Site: Talk Fee

Address: 1607 Norwalk Blvd.

City/State: Santa Fe Springs, CA

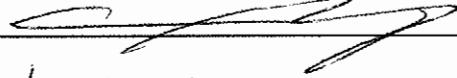
Generation date: 10-10-13

Amount purged: 433 gallons

Source of water: purging of various wells

In case of emergency, contact Cardno ERI at (805) 644-4157.

The above-listed, non-hazardous wastewater is/was transported to Cardno ERI's facility located at 4572 Telephone Rd., #916 Ventura, California 93003. Upon arrival at Cardno ERI's Ventura facility, waste is/was immediately transferred to a temporary holding tank, and later transported by vacuum truck under a separate manifest to the final TSDF for recycling.

Employee signature 

Date: 10-10-13

WELL SAMPLING AND SURVEYING

- 1) Open well heads. This may require a socket or a special Allen wrench.
- 2) If the wells are not surveyed by a licensed land surveyor, then survey the wells if this hasn't been done before as follows:
 - a) Select a permanent benchmark (e.g. curb at corner of site, property line). Record on "SURVEYGW" form.
 - b) Measure and record rectangular coordinates from benchmark to each well.
 - c) Set up tripod and transit where it can see all wells and the benchmark = Station "A". If you can't see all wells, two transit locations must be used. At least one well surveyed from Station "A" must be resurveyed from Station "B". Preferably, two or more wells are resurveyed.
 - d) Carefully level the tripod using the bubble indicator.
 - e) Place stadia rod on benchmark and record height from crosshair to reference, (D_o).
 - f) Place stadia rod on each well (at the notch) and record ht. from well to crosshair, (D_w).
 - g) Calculate casing elevation as shown on data sheet SURVEYGW.

To check the accuracy in leveling the transit, set the transit in second spot and repeat steps 2c through 2g. Recalculation of casing elevations should agree within 0.01 ft. or a third placement of the tripod will be required.

- 3) Set up a decon station. This consists of four (4) buckets. Fill the first with deionized water and one (1) teaspoon (approximately one cap full) of Liquinox soap. Fill the next three (3) buckets with deionized water. To decon a probe or water level indicator, place the element and the tape in the buckets in series, finishing with a good rise. To decon a pump, place the pump, hose and wire leads into the buckets in series, and circulate water through the pump in each bucket. Move the equipment from the dirtiest to cleanest bucket, rinsing thoroughly in each bucket.
- 4) Decon the interface probe or water level indicator before inserting into each well. Review the historical groundwater concentrations and sample from cleanest well to hottest well, deconing between each well. Lower probe/indicator until it beeps - raise and lower and mark the level on the tape with your thumb. Estimate level to the nearest 0.01 ft. Note the depth to free product if present as indicated by the interface probe and the depth to water on your field notes and log. Note any odor when the probe is withdrawn from the well. Look for the notch or ink mark on the top of the well and measure all levels from that. Notch should be on the highest side of the well pipe. If no side is high, notch should be on the north side. Measure from the casing adjacent to the notch - not from the bottom of the notch. If there is no notch - make one. For sites that have free product, or historically have had free product, use a bailer to remove a sample of the top of the water column and measure the product in the bailer or look for a sheen. Take a picture of any bailers with product after labeling the bailer with the well number.
- 5) If there is free product, do not purge or sample. The presence of liquid phase hydrocarbons means the concentration in the water will be high anyway and the pump will be difficult to get clean enough to avoid contaminating other wells.
- 6) Developing: If the well has not been developed (it is new), surge the well by moving bailer up and down vigorously in the well for about 5 minutes. This will wash silt from the sand pack into the well where it can be removed.
- 7) Pull out as much silt as possible by running the bailer all the way to the bottom and withdrawing. Continue bailiing until water is fairly clear or until local regulatory specifications are met. Removal of silt with the bailer will extend the pump life. Contact the Project Manager if water does not clear up by 10 casing volumes.

- 8) Decon pump by washing in TSP/water the rinsing with tap water and rinsing again with deionized water. Then pump clean water through the pump to push out any dirty water.
- 9) **Purging:** Place pump in well about 2 to 5 feet off bottom. Withdraw at least 3 casing volumes from the well, or until temperature, pH and conductivity stabilize (see local regulations). Be careful not to let the pump run dry. If an electric purging pump is used, such as a Grundfos pump, check the water level in the well with the water level indicator and slow pump down when water level is within 2 ft of the pump head. While purging, collect a water sample as often as possible and check for pH, conductivity, and temperature. Stable pH and conductivity would indicate the well has been filled with representative groundwater and purging is complete. If well recharges slowly, remove 1.5 casing volumes. Estimate flow rates by recording the time it takes to fill a 5-gallon bucket (1/2 of a 55-gallon barrel, etc.)
- 10) Decon pump thoroughly between each well by repeating step 7.
- 11) Label bottles with a "Sharpie Pen" when they are dry. Label as W-xx-MWY, where xx is water depth below surface in feet and y is well number (refer to SOP-1).
- 12) After the well has been developed, sample the water using a disposable bailer and surgical gloves to prevent oil from your hands from contaminating the sample. Be sure to leave no headspace or bubbles in any water sample to be tested for volatiles. Wells should be sampled within (24) hours of purging and the well should have recovered to within 80% of its volume before purging. (Slow recharge wells need to be addressed with the Project Manager - and may have to be purged slowly). Gasoline contaminated water requires at least three (3) 40 ml VOA's from each well. Preserve samples by acidifying to pH <2 (usually with two drops of HCl). Water suspected of contamination with oil or diesel requires 2 1-liter samples in amber bottles. Samples contaminated with oil will require 10 drops of H₂SO₄ for preservation. Samples for organic lead require two (2) 1-liter amber bottles.
- 13) Place like vials in a baggie and label the baggie. Put vials and baggie in an ice chest filled with ice and document samples and analyses required on a chain of custody. Take samples to the laboratory the same day samples are collected if possible, at least within 24 hours.
- 14) Clean wellhead gaskets (seals), put locking caps on the wells and replace the covers. Cover and label the drums (if any) of purge and decon water.

<u>Analysis</u>	<u>Bottles</u>	<u>Preservative</u>
8015 mod gasoline/8020(602)	min. of 3 x 40 ml VOA	2 drops HCl to pH <2
8015 mod diesel/8020(602)	2 1-liter & 3 x 40 ml VOA	2 drops HCl to pH <2 (applied to VOA's)
418.1 (TRPH)	2 1-liter amber	10 drops H ₂ SO ₄ to pH <2
Organic Lead	2 1-liter amber	no preservative suggested
HOC - 8010 (601)	min. of 3 x 40 ml VOA	no preservative suggested

Items Needed:

Water Level Indicator	Distilled Water
Disposable Bailers	4 Buckets
Generator	Bottle Brush
Grundfos Pump and Reel	TSP Detergent
Grundfos Pump Control Box	Stainless Steel Cable or Poly Rope
Hydac Cond/Temp/pH Meter	Cooler with Ice
Liter Bottles	Socket set and Allen Wrench (CNI Key)
VOAs	Plastic sheeting

Items Needed for Surveying:

Topcon AT-F7 Transit
Tripod
Stadia Rod

SOP-6
Quarterly Well Monitoring
Rev 6/05

QUARTERLY WELL MONITORING

- 1) Give the site manager advance notification of field activities. Arrange for a sufficient number of drums. Obtain a site plan with the location and ID's of the wells to be monitored and a copy of the table from the last quarterly report with the previous groundwater data.
- 2) Open well heads. This may require a socket or a special allen wrench.
- 3) Set up decon station per SOP-5. Measure groundwater depths with water level indicator as per SOP-5 before any other action is taken. If the depth to the bottom of the monitoring well is unknown, reel out the water level indicator until you feel the probe contact the bottom. You may have to raise and lower the probe several times to "feel" contact with the bottom. The probe is not very heavy, and the bottom of the well may have a cushioning layer of silt. Record the depth of the well once you feel confident the probe is at the bottom. Note odors from well.
- 4) Calculate the linear footage of water in each well, by subtracting the depth to water from the total well depth. To obtain the casing volume in gallons, multiply the linear footage by a constant for the given well casing diameter. Typically, three casing volumes are purged from each well prior to sampling. **Always** Round up - if 3.4 gallons, then purge 4 gallons - if 12.1 gallons, then purge 13 gallons.

<u>Casing diameter</u>	<u>Gallons per linear foot</u>
2"	0.17
4"	0.66
6"	1.50
8"	2.60

- 5) After measuring all water levels, begin purging the wells in order of the cleanest to the most contaminated based on last quarter's data. Well purging procedures are outlined in SOP-5. While wells containing free floating product may not be sampled, the project manager may want the free product removed manually by bailer. Check with the project manager before bailing LPH. You may find that for shallow wells, it may be quicker to bail manually rather than set up the pump. Place purge and decon water in a 55-gallon drum or treat on site. Do not mix purge water from different wells in one drum. Record all purge data on Groundwater Sampling Field Logs. Record "LPH" and the thickness in feet and inches (to nearest 1/16 of an inch) in the comments section if a measurable level of LPH present. If non-measurable amount present then record "Sheen" in the comments section.
- 6) When the well has recovered at least 80% of its' original water level, collect samples using a clean, new disposable bailer. Use a new disposable bailer for each well. Make sure the rope or line is tied securely on the bailer, you don't want to go fishing. Sample in order of the cleanest to the most contaminated. If required, collect field (equipment) blanks.
- 7) Trip blanks are a QA/QC procedure that must be collected at every site. Obtain a trip blank from the laboratory. They will make them up for you. The trip blank is taken unopened to the site and is kept with the other samples in the cooler unopened during the day's sampling. Label the bottle as an arbitrary monitoring well. For example: if there are 5 monitoring wells to be sampled at the site, the trip blank should be labeled as if it were a sample from MW6. The trip blank is never opened and it is used to determine if any contaminants are introduced by the laboratory or during transportation of the samples.
- 8) Field (equipment) blanks are a QA/QC procedure to be collected at the project manager's discretion (or always for LACDPW sites). To collect a field blank decon a bailer thoroughly; pour distilled water into the bailer; pour the distilled water from the bailer into appropriate sample bottle(s) for the analysis

to be performed, allow for no headspace; label the bottle as an arbitrary monitoring well. For example: if there are 5 monitoring wells to be sampled at the site plus a trip blank, and a field blank is to be collected, the field blank should be labeled as if it were a sample from MW7 (the trip blank is MW6). If a disposable bailer is used for sampling, use a new disposable bailer to collect the field blank.

- 9) Label sample containers when they are dry (refer to SOP-1). Place vials from each well in a separate plastic zip lock bag. Put bag in an ice chest and document samples and analyses required on a chain of custody (see attached examples).
- 10) Replace the locking caps, and the covers. Cover and label the drums of waste water. Place the drums on site in a location selected by the site manager. Usually, this will be near a dumpster or in the back, away from public view. Labels should face outward.
- 11) Decon all equipment per SOP-5 before leaving the site.

In general, groundwater sampling will be performed in accordance with LUFT guidelines. Several local agencies require that groundwater sampling occur under slightly different guidelines. Check with the project manager to find out which sites require special groundwater sampling procedures. Typically, the following apply:

Orange County Health Care Agency Requirements

No special requirements. Water sampling will be performed as per the State Water Resources Board's LUFT manual.

LARWQCB Groundwater Requirements

- o Purge a minimum of three well volumes if recovery is fast, or one borehole volume if recovery is slow (water does not recover to 80% of original level within two hours).
- o The last three readings must be within 10% for conductivity, temperature, and pH to show stabilization. This means that all three consecutive readings must be within these limits - the first with the middle, and the first with the last, and the middle with the last. For instance, pH readings of 6.92, 6.95, and 7.00 would be sufficient.
- o Even though there are no guidelines for turbidity, the measurements should be less than 10 NTU, or meet the baseline level established during development, upon completion of purging. Check with project manager if you use the baseline turbidity level.
- o Prior to sampling document recovery time by measuring the water level in each well to prove that at least 80% recovery has occurred.
- o A trip blank must be collected.
- o In the comments column of the chain of custody, write "Prepare laboratory report in WIP format."

San Diego Department of Health Services Groundwater Sampling Requirements

- o SDDHS does not encourage purging wells until dry.
- o Purge one borehole volume of water if recovery is fast, collecting pH/temperature/conductivity measurements while purging, then remove an additional one-half borehole volume of water. If the first and second measurements vary by less than 10%, purging is considered adequate. If not, keep purging water in one-half borehole volume increments until the measurements vary by less than 10%,

or three borehole volumes have been removed. Obtain three consecutive pH/temperature/conductivity measurements that are within 10% of each other.

- o If recovery is slow (water does not recover to 80% of original level within two hours) purge only one borehole volume of water.
- o Prior to sampling document recovery time by measuring the water level in each well to prove that at least 80% recovery has occurred.

Ventura County Environmental Health Division
Groundwater Sampling Requirements

- o A trip blank and a duplicate sample must be analyzed for each site.
- o Custody seals must be place over the cap of each sample.

Under certain conditions the calculated purge volumes will need to be calculated in borehole volumes instead of well casings volumes. Use the following to calculate borehole volume in gallons.

<u>Well I.D.</u>	<u>Bore Volume</u>
2"	0.90 gal/ft. in water
4"/or nested wells	1.70 gal/ft. in water

The completed groundwater sampling log must contain:

- pH/temp./conductivity and turbidity measurements indicating stabilization
- time and volume of water removed at each pH/temp./conductivity measurements
- total volume of water purged
- name of personnel performing sampling
- date and project number
- problems or unusual conditions arising during purging or sampling, such as the well going dry during purging, water in the well vault, missing well caps or locks, odors, appearance of purge water, etc.
- 80% recovery measurement and time of measurement after purging and before sampling

All chains of custody for the client's groundwater sites must contain the consultant work release number, station identification number and client contact among the other items to be filled out. Check the groundwater sampling field log and chain of custody for completeness, accuracy and neatness. If you have any questions, call!!!

Make sure that the date and time of relinquished and accepted at the lab are the same on the chain of custody. Also, make sure the lab fills in the sample condition information and signs for the samples on the chain of custody

Santa Barbara County Environmental Health Services
Groundwater Monitoring Guidelines

- I. Groundwater Monitoring
 - A. Groundwater levels are to be monitored/measured in **all wells** in a short time span.
 - B. Measure the groundwater levels (correct for "free product" thickness).
 - C. Use a clear bailer to check for the presence of "floating product," sheen, and odors.
 - D. Replace well cover until ready to purge well.
- II. Purgging
 - A. Amount: generally 3 to 5 (no more than 10) well volumes; via bailer, pumps, or vacuum truck.

- B. Parameters (pH, temperature, conductivity) shall stabilize while purging.
 - 1. Measure the parameters of a small volume (i.e., a 500 ml) of the water as it is removed from the well. Measure the parameters initially and at regular volume intervals (e.g., after every well casing volume). More frequent testing may be needed if the well is known to go dry.
 - 2. Wells must be allowed to recharge prior to sampling (see section G of the Santa Barbara County LUFT Manual).
- C. Slow recharging wells are wells that are purged dry before removing 3 well volumes of water, and take more than **two (2)** hours to recharge.
 - 1. Note this on the field records and estimate the number of well volumes removed.
 - 2. Allow the well to recharge a minimum of two (2) feet and then sample.
 - 3. **Sample wells no later than 24 hours after purging.**
 - 4. Note the water level and percentage of recharge in the report.

III. Sample Collection

- A. Use either a decontaminated Teflon, stainless steel, or disposable bailer.
- B. Sample containers are to be supplied and certified by a laboratory:
 - 1. VOAs of 40 ml volume (at least 3 per well – check with lab and the PM for specific requirements); fill VOAs first to reduce volatilization.
 - 2. 4 oz sample containers for Pb (metallic lead) analysis (if needed).
- C. Fill containers by pouring along the inside of the vial to reduce volatilization.
- D. Form a positive meniscus with the water, to avoid trapping air, before placing the cap on the VOA. **Samples with headspace are not acceptable for analysis.**
 - 1. Check for bubbles by inverting and tapping gently to dislodge bubbles.
 - 2. If bubbles are found, uncap and repeat steps C and D.
- E. Label all samples and store immediately in an ice chest at 4 degrees Celsius filled with ice.
- F. Be careful to properly decontaminate equipment between each and every well.